```
=> fil reg
FILE 'REGISTRY' ENTERED AT 17:16:48 ON 23 MAY 2007
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   22 MAY 2007  HIGHEST RN 935655-41-7
DICTIONARY FILE UPDATES:  22 MAY 2007  HIGHEST RN 935655-41-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d l17 que stat
L5                SCR 2043
L7                STR
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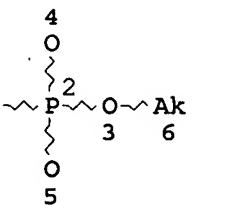


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NODE ATTRIBUTES:
CONNECT IS E1  RC AT   6
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   6
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X12 C  AT   6

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L10       28990 SEA FILE=REGISTRY SSS FUL L7 NOT L5
L11               STR
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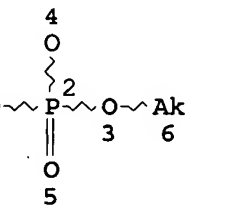

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NODE ATTRIBUTES:
CONNECT IS E1  RC AT   6
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   6
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X12 C  AT   6

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L13             SCR 2040
L15             STR
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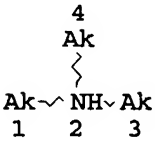


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NODE ATTRIBUTES:
CONNECT IS E1  RC AT   1
CONNECT IS E1  RC AT   3
CONNECT IS E1  RC AT   4
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   1
GGCAT   IS SAT  AT   3
GGCAT   IS SAT  AT   4
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X5 C  AT   1
ECOUNT  IS M1-X5 C  AT   3
ECOUNT  IS M1-X5 C  AT   4

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
L17           0 SEA FILE=REGISTRY SUB=L10 SSS FUL L11 AND L15 AND L13

100.0% PROCESSED    1194 ITERATIONS                          0 ANSWERS
SEARCH TIME: 00.00.01


=> d l22 que stat
L5              SCR 2043
L7              STR
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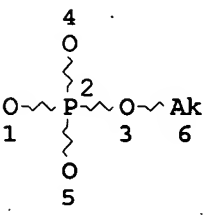


```
NODE ATTRIBUTES:
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CONNECT IS E1  RC AT   6
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   6
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X12 C  AT   6

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   6

STEREO ATTRIBUTES: NONE
L10       28990 SEA FILE=REGISTRY SSS FUL L7 NOT L5
L20             STR
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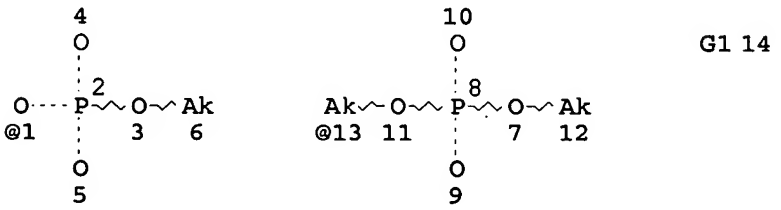


```
VAR G1=1/13
NODE ATTRIBUTES:
CONNECT IS E1  RC AT   6
CONNECT IS E1  RC AT  12
CONNECT IS E1  RC AT  13
DEFAULT MLEVEL IS ATOM
GGCAT   IS SAT  AT   6
GGCAT   IS SAT  AT  12
GGCAT   IS SAT  AT  13
DEFAULT ECLEVEL IS LIMITED
ECOUNT  IS M1-X12 C  AT   6
ECOUNT  IS M1-X12 C  AT  12
ECOUNT  IS M1-X12 C  AT  13

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L22        2924 SEA FILE=REGISTRY SUB=L10 SSS FUL L20

100.0% PROCESSED    7488 ITERATIONS                    2924 ANSWERS
SEARCH TIME: 00.00.01


=> d his nofile

     (FILE 'HOME' ENTERED AT 15:57:01 ON 23 MAY 2007)

     FILE 'HCAPLUS' ENTERED AT 15:57:08 ON 23 MAY 2007
L1            1 SEA ABB=ON  PLU=ON  US2006155048/PN

     FILE 'REGISTRY' ENTERED AT 15:57:35 ON 23 MAY 2007
L2            7 SEA ABB=ON  PLU=ON  (121-44-8/BI OR 3138-43-0/BI OR
                36047-43-5/BI OR 42610-78-6/BI OR 79-10-7/BI OR 79-41-4/B
                I OR 9011-14-7/BI)
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     FILE 'LREGISTRY' ENTERED AT 15:57:43 ON 23 MAY 2007
L3             STR

     FILE 'REGISTRY' ENTERED AT 16:03:57 ON 23 MAY 2007
L4            48 SEA SSS SAM L3
L5               SCR 2043
L6            50 SEA SSS SAM L3 NOT L5
L7               STR L3
L8            50 SEA SSS SAM L7
L9            50 SEA SSS SAM L7 NOT L5
L10        28990 SEA SSS FUL L7 NOT L5
               SAV L10 TEMP SAS178/A

     FILE 'LREGISTRY' ENTERED AT 16:18:18 ON 23 MAY 2007
L11            STR L7
L12            STR

     FILE 'REGISTRY' ENTERED AT 16:20:17 ON 23 MAY 2007
L13            SCR 2040
L14             9 SEA SUB=L10 SSS SAM L11 AND L12 AND L13
L15            STR L12
               DIS
L16             0 SEA SUB=L10 SSS SAM L11 AND L15 AND L13
L17             0 SEA SUB=L10 SSS FUL L11 AND L15 AND L13
L18            STR L7
L19            50 SEA SUB=L10 SSS SAM L18
L20            STR L18
L21            50 SEA SUB=L10 SSS SAM L20
L22          2924 SEA SUB=L10 SSS FUL L20
               SAV L22 SAS178S1/A
L23             1 SEA ABB=ON  PLU=ON  121-44-8/RN
L24             1 SEA ABB=ON  PLU=ON  TRIMETHYLAMINE/CN
L25             1 SEA ABB=ON  PLU=ON  TRIPROPYLAMINE/CN
L26             1 SEA ABB=ON  PLU=ON  TRI-ISO-PROPANOLAMINE/CN
L27             1 SEA ABB=ON  PLU=ON  TRIBUTYLAMINE/CN
L28             1 SEA ABB=ON  PLU=ON  TRI-TERT-BUTYLAMINE/CN
L29             1 SEA ABB=ON  PLU=ON  TRI-SEC-BUTYLAMINE/CN
L30             7 SEA ABB=ON  PLU=ON  (L23 OR L24 OR L25 OR L26 OR L27 OR
               L28 OR L29)

     FILE 'HCAPLUS' ENTERED AT 17:09:08 ON 23 MAY 2007
L31         12174 SEA ABB=ON  PLU=ON  L22
L32         37055 SEA ABB=ON  PLU=ON  L30
L33           116 SEA ABB=ON  PLU=ON  L31 AND L32
L34          4750 SEA ABB=ON  PLU=ON  L22(L)MOA+ALL/RL
L35         13651 SEA ABB=ON  PLU=ON  L30(L)MOA+ALL/RL
L36            40 SEA ABB=ON  PLU=ON  L34 AND L35
L37            38 SEA ABB=ON  PLU=ON  L36 AND (1840-2003)/PY,PRY,AY
L38               QUE ABB=ON  PLU=ON  STABLE? OR STABILIZ?
L39             7 SEA ABB=ON  PLU=ON  L37 AND L38
L40            31 SEA ABB=ON  PLU=ON  L37 NOT L39


=> fil hcap
FILE 'HCAPLUS' ENTERED AT 17:17:09 ON 23 MAY 2007
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FILE COVERS 1907 - 23 May 2007 VOL 146 ISS 22
FILE LAST UPDATED: 22 May 2007 (20070522/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l39 ibib abs hitstr hitind 1-7

L39 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:159893 HCAPLUS
DOCUMENT NUMBER: 142:199124
TITLE: Thermal **stabilizer** for plastics
INVENTOR(S): Ittmann, Guenther
PATENT ASSIGNEE(S): Roehm GmbH & Co. KG, Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10335578	A1	20050224	DE 2003-10335578	20030731
WO 2005021631	A1	20050310	WO 2004-EP4088 <--	20040417
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1532202	A1	20050525	EP 2004-728108	200404

17
<--
EP 1532202 B1 20060531
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
CN 1697855 A 20051116 CN 2004-80000489
200404
17
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AT 328034 T 20060615 AT 2004-728108
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17
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JP 2006524715 T 20061102 JP 2006-500092
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US 2006155048 A1 20060713 US 2005-528178
200503
17
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PRIORITY APPLN. INFO.: DE 2003-10335578 A
200307
31
<--
WO 2004-EP4088 W
200404
17

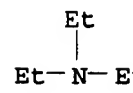
OTHER SOURCE(S): MARPAT 142:199124

AB A suitable heat **stabilizer** for polymers, especially PMMA, is a mono- or dialkylated phosphoric acid ammonium salt Rn1PO3-(HN+-R32)m (R1 = Me to n-dodecyl, also iso-Pr, iso-butyl; R2 = Me, Et, (iso-)propyl, butyl; n = 1 or 2; m = 2 or 1), which is added in concns. 0.001-5.0 weight% referred to the polymerizable monomer (mixture). A remarkable increased thermostability with weight loss 2% was observed at 281° compared with 209°, if 99.87 weight% MMA-PMMA was polymerized with 0.08 weight% AIBN and 0.05 weight% di-Me phosphoric acid triethylamine.

IT **121-44-8D**, Triethylamine, reaction products with Zelec UN
RL: **MOA (Modifier or additive use); USES (Uses)**
(heat **stabilizer**; thermal **stabilizer** for plastics)

RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



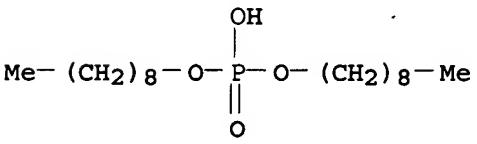
IT **36047-43-5D**, Monononylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(mixed with dinonyl phosphate, Zelec UN; thermal **stabilizer** for plastics)

RN 36047-43-5 HCAPLUS

CN Phosphoric acid, monononyl ester (9CI) (CA INDEX NAME)

Me—$(CH_2)_8$—OPO_3H_2

IT **3138-43-0D**, Dinonylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use)**; **USES (Uses)**
(mixed with monononyl phosphate, Zelec UN; thermal **stabilizer** for plastics)
RN 3138-43-0 HCAPLUS
CN Phosphoric acid, dinonyl ester (8CI, 9CI) (CA INDEX NAME)



IC ICM C08K005-521
ICS C08L033-08; C08J005-10
CC 37-6 (Plastics Manufacture and Processing)
ST phosphorus contg org compd heat **stabilizer** PMMA; alkylated phosphoric acid ammonium salt polymer heat **stabilizer**; triethylamine zelec un reaction product thermal **stabilizer** PMMA
IT Organic compounds, uses
RL: MOA (Modifier or additive use); USES (Uses)
(phosphorus-containing, heat **stabilizer**; thermal **stabilizer** for plastics)
IT Heat **stabilizers**
(thermal **stabilizer** for plastics)
IT Molded plastics, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermal **stabilizer** for plastics)
IT Polymers, miscellaneous
RL: MSC (Miscellaneous)
(thermal **stabilizer** for plastics)
IT **121-44-8D**, Triethylamine, reaction products with Zelec UN 42610-78-6D, Zelec UN, reaction products with triethylamine
RL: **MOA (Modifier or additive use)**; **USES (Uses)**
(heat **stabilizer**; thermal **stabilizer** for plastics)
IT **36047-43-5D**, Monononylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use)**; **USES (Uses)**
(mixed with dinonyl phosphate, Zelec UN; thermal **stabilizer** for plastics)
IT **3138-43-0D**, Dinonylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use)**; **USES (Uses)**
(mixed with monononyl phosphate, Zelec UN; thermal **stabilizer** for plastics)
IT 79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, Methacrylic acid, esters, polymers 9011-14-7P, PMMA
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermal **stabilizer** for plastics)

L39 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:170303 HCAPLUS
DOCUMENT NUMBER: 118:170303
TITLE: Crystalline polyolefin compositions with good stiffness and heat resistance
INVENTOR(S): Nakajima, Yoichi
PATENT ASSIGNEE(S): Chisso Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04246441	A	19920902	JP 1991-32048	199101 31
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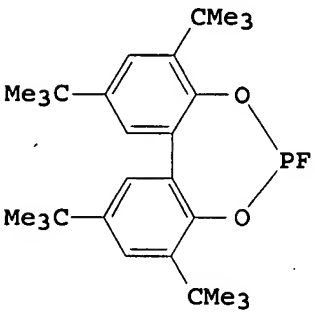
JP 2896611	B2	19990531		
PRIORITY APPLN. INFO.:			JP 1991-32048	199101 31
			<--	

GI

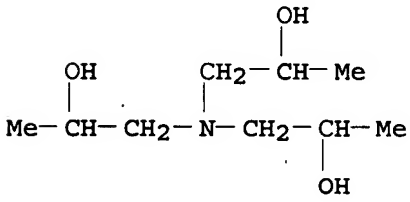


I

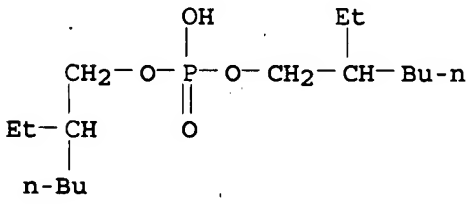
AB The title compns. contain crystalline polyolefins and heat **stabilizer**-nucleating agents selected from cyclic fluorophosphites FP(OR1)OR2 (R1R2 = ring-completing group derived from a substituted bisphenol), metal compds., dialkyl esters of dicarboxyalkanesulfonic acid Li, Na, or K salts, and aliphatic amines. A composition contained polypropene 100, I 0.1, K stearate 0.1, and BuCHEtCH2O2CCH2CH(SO3Na)CO2CH2CHEtBu 0.1 part.

IT **122-20-3**, Triisopropanolamine **141-65-1** **15505-13-2** **19045-76-2** **19045-77-3**
RL: **USES (Uses)**
(heat **stabilizer**-crystal nucleating agent, for crystalline polyolefins)

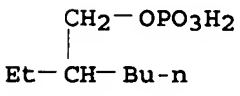
RN 122-20-3 HCAPLUS
CN 2-Propanol, 1,1',1''-nitrilotris- (CA INDEX NAME)

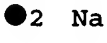


RN 141-65-1 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, sodium salt (1:1) (CA INDEX NAME)

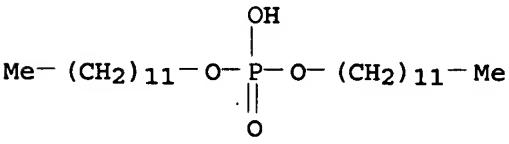


RN 15505-13-2 HCAPLUS
CN Phosphoric acid, mono(2-ethylhexyl) ester, sodium salt (1:2) (CA INDEX NAME)





RN 19045-76-2 HCAPLUS
CN Phosphoric acid, didodecyl ester, potassium salt (8CI, 9CI) (CA INDEX NAME)



RN 19045-77-3 HCAPLUS
CN Phosphoric acid, monododecyl ester, dipotassium salt (8CI, 9CI) (CA

INDEX NAME)

$H_2O_3PO-(CH_2)_{11}-Me$

●2 K

IC ICM C08L023-00
ICS C08K003-22; C08K003-26; C08K005-39; C08K005-42; C08K005-47; C08K005-49; C08K005-52; C08K005-5317
CC 37-6 (Plastics Manufacture and Processing)
ST polyolefin crystal nucleation heat **stabilizer**; fluorophosphite bisphenol heat **stabilizer** polyolefin; sulfosuccinate dialkyl crystal nucleation polyolefin; stearate potassium crystal nucleation polyolefin; polypropene crystal nucleation heat **stabilizer**
IT Amines, uses
Quaternary ammonium compounds, uses
RL: USES (Uses)
(heat **stabilizer**-crystal nucleating agents, for crystalline polyolefins)
IT Heat **stabilizers**
(nucleating agents and, for crystalline polyolefins)
IT Crystal nucleation
(agents, heat **stabilizers** and, for crystalline polyolefins)
IT Sulfonic acids, compounds
RL: USES (Uses)
(alkali metal salts, heat **stabilizer**-crystal nucleating agents, for crystalline polyolefins)
IT Amines, uses
RL: USES (Uses)
(poly-, heat **stabilizer**-crystal nucleating agents, for crystalline polyolefins)
IT Alkenes, polymers
RL: USES (Uses)
(polymers, heat **stabilizer**- and crystal nucleation agent-containing, rigid)
IT 9003-07-0, Polypropylene 9010-79-1, Ethylene-propylene copolymer 25895-47-0, Butene-1-ethylene-propylene copolymer 106565-43-9, Ethylene-propylene block copolymer
RL: USES (Uses)
(heat **stabilizer**- and crystal nucleation agent-containing, rigid)
IT 56-37-1, N,N,N-Triethyl-N-benzylammonium chloride 72-17-3, Sodium lactate 100-97-0, uses 109-76-2D, 1,3-Propanediamine, tallow alkyl derivs. **122-20-3**, Triisopropanolamine 124-09-4, 1,6-Hexanediamine, uses 124-22-1, 1-Dodecanamine 124-28-7, N-Stearyl-N,N-dimethylamine 136-29-8 **141-65-1** 142-47-2, Mono-sodium glutamate 148-18-5, Sodium diethyldithiocarbamate 150-90-3, Sodium succinate 471-34-1, Calcium carbonate, uses 512-25-4, Barium citrate 532-32-1, Sodium benzoate 546-89-4, Lithium acetate 546-93-0, Magnesium carbonate 553-91-3, Lithium oxalate 577-11-7, Sodium di(2-ethylhexyl) sulfosuccinate 585-09-1, Potassium malate 593-29-3, Potassium stearate 868-19-9 1309-42-8, Magnesium hydroxide 1309-48-4, Magnesium oxide (MgO), uses 2492-26-4, Sodium 2-benzothiazolethiolate 5908-78-1, Barium salicylate

6332-55-4 6976-36-9 12304-65-3, Hydrotalcite 13329-67-4, Sodium 12-hydroxyoctadecanoate 15217-42-2 **15505-13-2** 17264-54-9, Sodium p-toluate 17301-53-0, N-Docosyl-N,N,N-trimethylammonium chloride 18448-65-2 **19045-76-2** **19045-77-3** 19147-16-1 19473-49-5, Mono-potassium glutamate 19766-89-3, Sodium 2-ethylhexanoate 20752-56-1 21645-51-2, Aluminum hydroxide, uses 24170-14-7 24994-20-5 31017-83-1 33976-12-4 39663-84-8, Lithium glycolate 40870-38-0D, tallow alkyl derivs. 42596-02-1 51126-65-9 51568-80-0 52497-24-2 55695-80-2, Mono-lithium glutamate 56418-89-4, Barium 3,5-di-tert-butyl-4-hydroxybenzoate 56624-77-2 62122-15-0 65597-20-8, Lithium dihexyl sulfosuccinate 66648-22-4, Lithium 2-benzothiazolethiolate 69882-55-9 74563-70-5 91993-34-9 94945-28-5 113682-88-5 118337-09-0 119735-73-8 119735-74-9 122757-26-0, 2,2'-Methylenebis(4,6-di-tert-butylphenyl) fluorophosphite 124027-29-8 133940-41-7 133949-87-8 133949-88-9 133949-89-0 133949-90-3 134016-96-9 134883-00-4D, coco alkyl derivs. 134947-42-5 134947-43-6 134947-44-7 138511-57-6 141181-27-3 142359-84-0 142539-85-3 144722-63-4 144722-67-8 146622-60-8 146623-02-1 146623-03-2 146793-89-7 146793-90-0 146793-91-1 146793-92-2 146793-93-3 146793-94-4 146793-95-5 146793-96-6 146793-97-7 146793-98-8 146793-99-9 146794-00-5 146794-01-6 146794-02-7 146863-78-7 146863-79-8

RL: **USES (Uses)**

(heat **stabilizer**-crystal nucleating agent, for crystalline polyolefins)

L39 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN

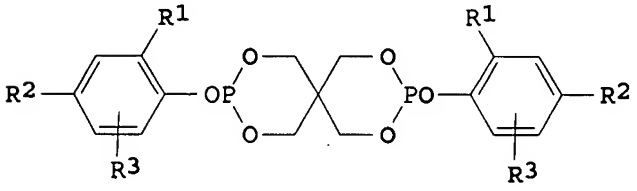
ACCESSION NUMBER: 1987:120065 HCAPLUS
DOCUMENT NUMBER: 106:120065
TITLE: Diaryl pentaerythritol diphosphite
INVENTOR(S): Tajima, Kenji; Takahashi, Masayuki; Nishikawa, Kazunori; Takeuchi, Takashi
PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61225191	A	19861006	JP 1985-66300	19850329
			<--	
JP 05007396	B	19930128		
EP 199997	A2	19861105	EP 1986-104257	19860327
			<--	
EP 199997	A3	19880113		
EP 199997	B1	19910529		
R: BE, CH, DE, FR, GB, LI, NL				
US 4739090	A	19880419	US 1986-845903	19860328

PRIORITY APPLN. INFO.: JP 1985-66300 A 198503 29

OTHER SOURCE(S): MARPAT 106:120065

GI



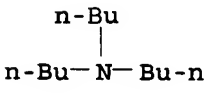
I

AB Cyclic phosphites I (R1 = C4-8 tertiary alkyl, cyclohexyl; R2, R3 = H, C1-8 alkyl), useful as synthetic resin **stabilizers** (no data), are prepared Thus, 1.0 mol PCl3 was added to a mixture of 1.1 mol 2,4-(Me3C)2C6H3OH, 0.5 mol pentaerythritol, and 0.68 g Et3N in xylene at 90° with stirring to give 84.5% I (R1 = R2 = Me3C, R3 = H), vs. 51.5% without Et3N.

IT **102-82-9 121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalyst, for reaction of hindered phenols with pentaerythritol and phosphorus trichloride)

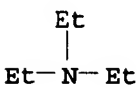
RN 102-82-9 HCAPLUS

CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)



RN 121-44-8 HCAPLUS

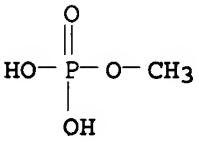
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



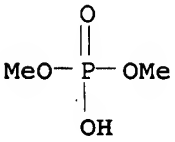
IT **812-00-0**, Monomethyl phosphate **813-78-5**, Dimethyl phosphate **3921-30-0**
RL: CAT (Catalyst use); **USES (Uses)**
(cocatalyst, for reaction of hindered phenol with pentaerythritol and phosphorus trichloride)

RN 812-00-0 HCAPLUS

CN Phosphoric acid, monomethyl ester (CA INDEX NAME)



RN 813-78-5 HCAPLUS
CN Phosphoric acid, dimethyl ester (CA INDEX NAME)



RN 3921-30-0 HCAPLUS
CN Phosphoric acid, monodecyl ester (CA INDEX NAME)

IC ICM C07F009-145
ICA B01J031-02
CC 29-7 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 37
ST diaryl pentaerythritol diphosphite resin **stabilizer**
IT Plastics
RL: RCT (Reactant); RACT (Reactant or reagent)
(**stabilizers** for, diaryl pentaerythritol diphosphites)
IT 68-12-2, uses and miscellaneous **102-82-9 121-44-8**
, uses and miscellaneous 1643-19-2, Tetrabutylammonium bromide
2782-91-4, Tetramethylthiourea 4519-28-2, Tetramethylphosphonium
bromide
RL: CAT (Catalyst use); **USES (Uses)**
(catalyst, for reaction of hindered phenols with pentaerythritol
and phosphorus trichloride)
IT **812-00-0**, Monomethyl phosphate **813-78-5**, Dimethyl
phosphate 838-85-7, Diphenyl phosphate 1571-33-1,
Phenylphosphonic acid 3658-48-8, Bis(2-Ethylhexyl)phosphonic acid
3921-30-0 6881-57-8
RL: CAT (Catalyst use); **USES (Uses)**
(cocatalyst, for reaction of hindered phenol with pentaerythritol
and phosphorus trichloride)
IT 26741-53-7P 70653-90-6P 70653-91-7P 70653-95-1P 70653-98-4P
106749-99-9P 106936-82-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as synthetic resin **stabilizer**)

L39 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:24873 HCAPLUS
DOCUMENT NUMBER: 106:24873
TITLE: Improving the stability of solidified radioactive ion-exchange resin particles
INVENTOR(S): Laske, Dietrich; Doehring, Lothar
PATENT ASSIGNEE(S): Gesellschaft zur Foerderung der

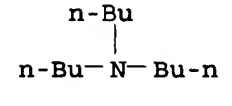
Industrieorientierten Forschung an den Schweizerischen Hochschulen und Weiteren Institutionen, Switz.
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 182172	A1	19860528	EP 1985-113953	19851102
			<--	
EP 182172	B1	19900816		
R: BE, DE, FR, GB, SE				
CH 664843	A5	19880331	CH 1984-5407	19841112
			<--	
US 4732705	A	19880322	US 1985-796747	19851112
			<--	
PRIORITY APPLN. INFO.:			CH 1984-5407 A	19841112
			<--	

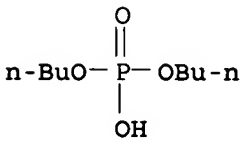
AB The stability of radioactive ion-exchange resin particles embedded in an organic and/or inorg. binder which is then allowed to harden is increased by treating the ion-exchange resin, before or during the solidification process, with ≥1 additive or heat to decrease the swelling factor below 1.7. Thus, Lewatit S 100, having a swelling factor of 2.1, was treated with dibutylamine to produce a swelling factor of 1.14. When the treated resin was solidified with cement, the product contained 35.1 kg dry substance in 100 L matrix, compared with 22 kg/100 L with untreated resin, and was water-resistant even after drying.

IT **102-82-9 107-66-4 1623-15-0**
RL: PEP (Physical, engineering or chemical process); PROC (Process);
USES (Uses)
(radioactive ion-exchanger treatment by, before or during solidification)

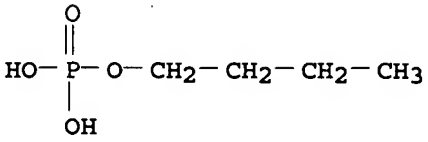
RN 102-82-9 HCAPLUS
CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)



RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



RN 1623-15-0 HCAPLUS
CN Phosphoric acid, monobutyl ester (CA INDEX NAME)



IC ICM G21F009-16
CC 71-11 (Nuclear Technology)
IT Cement
(radioactive ion-exchanger solidification with, **stabilization** in)
IT 64-19-7D, cocoalkylamine salts 77-98-5 78-90-0 78-90-0D, polysulfide derivs. 79-10-7, Acrylic acid, uses and miscellaneous 79-17-4D, polysulfide derivs. 80-62-6 80-70-6D, polysulfide derivs. 100-85-6 **102-82-9** 106-50-3, uses and miscellaneous 107-15-3, uses and miscellaneous 107-15-3D, polysulfide derivs. **107-66-4** 110-85-0, properties 110-85-0D, polysulfide derivs. 111-92-2, Dibutylamine 113-00-8D, polysulfide derivs. 123-46-6 140-89-6 302-01-2, properties 461-58-5D, polysulfide derivs. 557-34-6, Zinc acetate 563-41-7 621-85-2 1002-89-7, Ammonium stearate 1344-13-4 1344-81-6 1420-40-2 **1623-15-0** 2035-71-4 2052-49-5 2200-97-7 2235-54-3 2958-09-0 2986-19-8 4499-86-9 5282-80-4 5538-94-3 6891-44-7 7173-51-5 7446-70-0, Aluminum chloride, uses and miscellaneous 7705-07-9, Titanium trichloride, uses and miscellaneous 7705-08-0, Ferric chloride, uses and miscellaneous 7720-78-7, Ferrous sulfate 14518-69-5 17287-03-5 19402-63-2 23542-35-0 27103-90-8 29383-23-1, Vinyl imidazole 32680-30-1 33850-87-2, Tributylamine nitrate 37199-66-9 39345-92-1 39464-64-7 50864-67-0 51811-79-1 67559-83-5, Dibutylamine nitrate 69771-54-6 82098-48-4 100224-74-6 105849-28-3 105849-29-4 105850-84-8 105850-85-9 105850-86-0
RL: PEP (Physical, engineering or chemical process); PROC (Process); **USES (Uses)**
(radioactive ion-exchanger treatment by, before or during solidification)

L39 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:407943 HCAPLUS
DOCUMENT NUMBER: 103:7943
TITLE: Pressed materials such as chipboards with polyisocyanate binders using latent heat-activatable catalysts
INVENTOR(S): Kerimis, Dimitrios; Mueller, Peter; Kapps, Manfred
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 46 pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3328662	A1	19850221	DE 1983-3328662	198308 09
			<--	
US 4608407	A	19860826	US 1984-632341	198407 19
			<--	
NO 8403018	A	19850211	NO 1984-3018	198407 25
			<--	
NO 158751	B	19880718		
NO 158751	C	19881026		
CA 1225808	A1	19870825	CA 1984-459642	198407 25
			<--	
EP 133680	A1	19850306	EP 1984-108992	198407 30
			<--	
EP 133680	B1	19880427		
R: AT, BE, CH, DE, FR, GB, LI, SE				
AT 33848	T	19880515	AT 1984-108992	198407 30
			<--	
FI 8403101	A	19850210	FI 1984-3101	198408 07
			<--	
FI 78723	B	19890531		
FI 78723	C	19890911		
DK 8403821	A	19850210	DK 1984-3821	198408 08
			<--	
DK 159721	B	19901126		
DK 159721	C	19910422		
JP 60055016	A	19850329	JP 1984-165783	198408 09
			<--	
JP 03039530	B	19910614		

PRIORITY APPLN. INFO.:

DE 1983-3328662	A	198308 09
<--		
EP 1984-108992	A	198407

30

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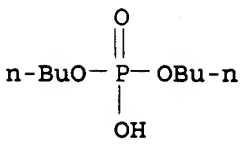
AB Ammonium salts prepared from amines and esters of P-containing acids are used as latent, heat-activated catalysts for the curing of polyisocyanate binders in lignocellulosic materials. Thus, 101 parts Et3N [121-44-8] and 248 parts MeP(O)(OMe)2 [756-79-6] were refluxed 8 h and then distilled in vacuo to remove unreacted phosphonate ester, giving 140 parts MeP(O)(OMe)ONEt3Me (I) [96203-11-1]. Wood chips (2250 parts) were mixed with 130 parts polymethylenepolyphenylene isocyanate (II) [9016-87-9] containing 0.5% I. This mixture, **stable** for at least 1-2 h at room temperature, was used as the center layer in a 3-layer composite prepared from wood chips containing II. The composite was cured 1.6 min in a mold at 170°. The cured composite had transverse tensile strength 0.25 MPa, compared with 0.20 for a composite cured similarly but without I.

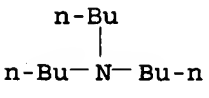
IT **107-66-4**
RL: **USES (Uses)**
(salt formation from amines and)

RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)

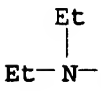


IT **102-82-9 121-44-8**, reactions
RL: **USES (Uses)**
(salt formation from di-Me methanephosphonate and)

RN 102-82-9 HCAPLUS
CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)



RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC ICM B29J005-00
ICS C08G018-18; C08L097-02

CC 43-9 (Cellulose, Lignin, Paper, and Other Wood Products)
Section cross-reference(s): 37

IT 78-40-0 **107-66-4** 756-79-6
RL: **USES (Uses)**
(salt formation from amines and)

IT **102-82-9** 109-02-4 111-92-2 120-94-5 **121-44-8**, reactions 280-57-9 3001-72-7 6674-22-2

RL: **USES (Uses)**
(salt formation from di-Me methanephosphonate and)

L39 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1984:492144 HCAPLUS
DOCUMENT NUMBER: 101:92144
TITLE: **Stabilizers** for halogen-containing resins
PATENT ASSIGNEE(S): Katsuta Kako Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

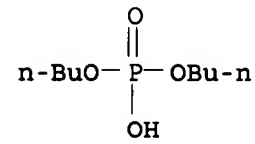
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59038250	A	19840302	JP 1982-148645	198208 27
			<--	
JP 03048222	B	19910723		

PRIORITY APPLN. INFO.: JP 1982-148645 198208 27
<--

AB Liquid **stabilizers** contain Zn and alkaline earth metal salts of C6-18 organic acids, organic H3PO3 esters, H3PO3 or H3PO4 compds. contg ≥1 P-OH linkage, organotin compds., N-containing compds., and solvents. Thus, a liquid **stabilizer** was prepared from calcium octoate [6107-56-8] 10, zinc octoate [557-09-5] 10, dibutyltin dilaurate [77-58-7] 2, triisopropanolamine [122-20-3] 0.5, dioctyl phthalate (I) [117-81-7] 11.5, oleyl alc. [143-28-2] Et diglycol [111-90-0] 3, PCOC2H4OEt)(OC2H4OC2H4OEt)(OC2H4OC2H4OBu) (II) [91433-53-3] 30, and (C10H21O)2POH (III) [19931-58-9] 30 parts. Sheets were prepared from PVC [9002-86-2] 100, I 50, an epoxidized soybean oil 2.0, barium stearate [6865-35-6] 0.4 zinc stearate [557-05-1] 0.6, and the liquid **stabilizer** 1.5 parts and had heat stability 65 min at 180°, good transparency, slight discoloration, weather resistance 1300 h, and slight blooming, compared with 60, slight turbidity, discoloration, 850, and bleeding, resp., for sheets using a liquid **stabilizers** containing 60 parts II and no III.

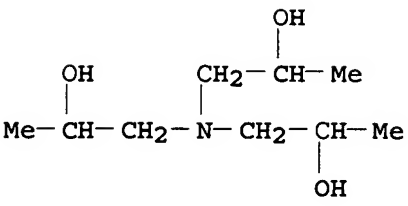
IT **107-66-4 122-20-3**
RL: **USES (Uses)**
(liquid **stabilizer** compns., for PVC)

RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



RN 122-20-3 HCAPLUS

CN 2-Propanol, 1,1',1''-nitrilotris- (CA INDEX NAME)



IC C08L027-00; C08K005-09; C08K005-17; C08K005-51; C08K005-57
CC 37-6 (Plastics Manufacture and Processing)
ST PVC heat **stabilizer**; phosphite heat **stabilizer** PVC; tin heat **stabilizer** PVC; amine heat **stabilizer** PVC; zinc heat **stabilizer** PVC
IT Plasticizers
(dioctyl phthalate, solvents, for liquid **stabilizer** compns., for PVC)
IT Heat **stabilizers**
Light **stabilizers**
(organic acid salts, containing phosphorus compds. and tin compds. and nitrogen compds. and solvents, for PVC)
IT Solvents
(organic, for liquid **stabilizer** compns., for PVC)
IT Alcohols, uses and miscellaneous
RL: USES (Uses)
(solvents, for liquid **stabilizer** compns., for PVC)
IT Amines, uses and miscellaneous
RL: USES (Uses)
(di-, liquid **stabilizer** compns., for PVC)
IT 77-58-7 100-37-8 102-71-6, uses and miscellaneous 107-15-3, uses and miscellaneous **107-66-4 122-20-3**
122-39-4, uses and miscellaneous 557-09-5 2718-67-4 4486-47-9
4712-55-4 6107-56-8 6172-74-3 19931-58-9 22205-30-7
25168-24-5 26761-46-6 32429-22-4 42800-31-7 82349-74-4
91422-01-4 91433-47-5 91433-48-6 91433-51-1 91433-52-2
91433-54-4
RL: **USES (Uses)**
(liquid **stabilizer** compns., for PVC)
IT 9002-86-2
RL: USES (Uses)
(liquid **stabilizers** for, containing organic acid salts, phosphorus compds. and tin compds. in nitrogen compds. and solvents)
IT 103-23-1 104-76-7 111-76-2 111-90-0 117-81-7 143-28-2
RL: USES (Uses)
(solvents, for liquid **stabilizer** compns. for PVC)
IT 557-05-1 1330-78-5 6865-35-6
RL: MOA (Modifier or additive use); USES (Uses)
(**stabilizers**, for PVC)

L39 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:148848 HCAPLUS
DOCUMENT NUMBER: 86:148848
TITLE: Free radical photosensitive materials
INVENTOR(S): Wainer, Eugene; Shirey, John E.; Ramins, Lothar
PATENT ASSIGNEE(S): Horizons Inc., Division of Horizons Research Inc., USA

SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3986880	A	19761019	US 1974-500117	197408 23

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PRIORITY APPLN. INFO.: US 1974-500117 A 197408 23

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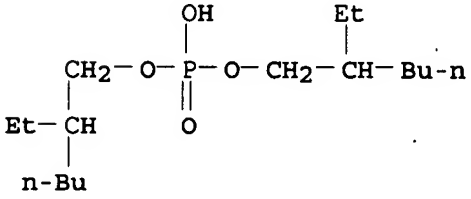
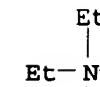
AB The shelf life of a free-radical photog. composition containing arylamines and an organic halogen compound is improved by including an alc. or a phenol derivative, a trialkyl or triaryl phosphate and triphenylcarbinol. Thus, a solution prepared from triphenylamine 26, triphenylstibine 16, triethylamine 64, 1,1-bis(p-dimethylaminophenyl)ethylene 80, CHI3 360, 4-aminopyrene 12, acetanilide 12, 4-phenylpyridine N-oxide 24, N-vinylcarbazole 2, 3,6-diisopropylcatechol (I) 5, triphenyl phosphate (II) 10, triphenylcarbinol (III) 75 mg, a polystyrene solution (27 g in PhMe 100 mL) 4, a poly(phenylene oxide) solution (18 g in CCl2CHCl 100 mL) 1 and 1,2-dichloroethane 2 mL was coated on a poly(ethylene terephthalate) support as a 0.003 in. layer, dried, exposed to a high-pressure Hg lamp and fixed by heating at 160° for 2 min to give an image with a speed of 98 mJ (for a net d. (Dmax-Dmin) of 1.0), a fog of 0.04 and a γ of 2.3 for a fresh film and 87 mJ, 0.05 and 2.0, resp., for a film stored for weeks vs. 165 mJ, 0.04 and 1.6 and 220 mJ, 0.2 and 1.0, resp., for a control using 2,6-di-tert-butylcresol in the place of I, II and III.

IT **298-07-7**
RL: **USES (Uses)**
(photosensitive compns. containing aryl amines, organic halogen compound, phenol derivative, triphenylcarbinol and, for photog. image production)
RN 298-07-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



IT **121-44-8**, uses and miscellaneous
RL: **USES (Uses)**
(photosensitive compns. containing organic halogen compound, triaryl phosphate, phenol derivative, triphenylcarbinol and, for photog. image production)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC G03C001-52
INCL 096090000R
CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic Processes)
ST free radical photog compn; aryl phosphate photog compn; alc **stabilizer** photog compn; phenol **stabilizer** photog compn; phenylcarbinol photog compn
IT 70-55-3 78-51-3 84-74-2 112-62-9 115-86-6 117-81-7 126-72-7 **298-07-7** 7260-11-9
RL: **USES (Uses)**
(photosensitive compns. containing aryl amines, organic halogen compound, phenol derivative, triphenylcarbinol and, for photog. image production)
IT 83-07-8 103-84-4 **121-44-8**, uses and miscellaneous 603-34-9 603-36-1 1131-61-9 1484-13-5 7478-69-5 13080-52-9 51279-53-9 62555-79-7
RL: **USES (Uses)**
(photosensitive compns. containing organic halogen compound, triaryl phosphate, phenol derivative, triphenylcarbinol and, for photog. image production)

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L40 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:159892 HCAPLUS
DOCUMENT NUMBER: 142:199123
TITLE: Internal releasing agent for plastics
INVENTOR(S): Ittmann, Guenther
PATENT ASSIGNEE(S): Roehm GmbH & Co. KG, Germany
SOURCE: Ger. Offen., 6 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10335577	A1	20050224	DE 2003-10335577	200307 31
WO 2005021228	A1	20050310	WO 2004-EP3868 <--	200404 13

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,

VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1648672	A1	20060426	EP 2004-726975	200404 13
			<--	
EP 1648672	B1	20070207		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1812874	A	20060802	CN 2004-80018263	200404 13
			<--	
JP 2007500613	T	20070118	JP 2006-521399	200404 13
			<--	
AT 353276	T	20070215	AT 2004-726975	200404 13
			<--	
US 2006237872	A1	20061026	US 2006-566000	200601 27
			<--	
PRIORITY APPLN. INFO.:			DE 2003-10335577 A	200307 31
			<--	
			WO 2004-EP3868 W	200404 13

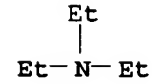
OTHER SOURCE(S): MARPAT 142:199123

AB A suitable releasing agent for polymers, especially PMMA, is a mono- or dialkylated phosphoric acid ammonium salt Rn1PO3-(HN+-R32)m (R1 = Me to n-dodecyl, also iso-Pr, iso-butyl; R2 = Me, Et, (iso-)propyl, butyl; n = 1 or 2; m = 2 or 1), which is added in concns. 0.01-5.0 weight% referred to the polymerizable monomer (mixture). Thus, 99.87 weight% MMA-PMMA was polymerized with 0.08 weight% AIBN and 0.05 weight% di-Me phosphoric acid triethylamine in a closed silicate glass chamber sealed with PVC in a water bath for 17 h at 45°, followed by subsequent polymerization for 3 h at 115°. The acrylate glass could be easily separated from the silicate glasses.

IT **121-44-8D**, Triethylamine, reaction products with Zelec UN
RL: **MOA (Modifier or additive use)**; RCT (Reactant); RACT (Reactant or reagent); **USES (Uses)**
(internal releasing agent; internal releasing agent for plastics)

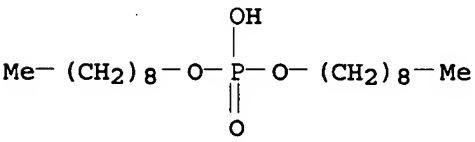
RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **36047-43-5D**, Mononononylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(mixed with dinonyl phosphate, Zelec UN; internal releasing agent for plastics)
RN 36047-43-5 HCAPLUS
CN Phosphoric acid, mononononyl ester (9CI) (CA INDEX NAME)

IT **3138-43-0D**, Dinonylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(mixed with mononononyl phosphate, Zelec UN; internal releasing agent for plastics)
RN 3138-43-0 HCAPLUS
CN Phosphoric acid, dinonyl ester (8CI, 9CI) (CA INDEX NAME)



IC ICM B29C033-60
ICS C08K005-521; C08J005-10; C08L033-08
CC 37-6 (Plastics Manufacture and Processing)
IT **121-44-8D**, Triethylamine, reaction products with Zelec UN
RL: **MOA (Modifier or additive use)**; RCT (Reactant); RACT (Reactant or reagent); **USES (Uses)**
(internal releasing agent; internal releasing agent for plastics)
IT **36047-43-5D**, Mononononylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(mixed with dinonyl phosphate, Zelec UN; internal releasing agent for plastics)
IT **3138-43-0D**, Dinonylphosphate, reaction products with triethylamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(mixed with mononononyl phosphate, Zelec UN; internal releasing agent for plastics)

L40 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:796223 HCAPLUS
DOCUMENT NUMBER: 137:359333
TITLE: Deactivation in Sub- and Supercritical Carbon Dioxide
AUTHOR(S): Murzin, A. A.; Babain, V. A.; Shadrin, A. Yu.; Kamachev, V. A.; Romanovskii, V. N.; Starchenko, V. A.; Podoinitsyn, S. V.; Revenko, Yu. A.; Logunov, M. V.; Smart, N. G.
CORPORATE SOURCE: Khlopin Radium Institute, Research and Production Association, St. Petersburg, Russia
SOURCE: Radiochemistry (Moscow, Russian Federation)(Translation of Radiokhimiya) (

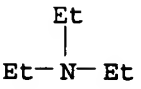
2002), 44(4), 410-415
CODEN: RDIOEO; ISSN: 1066-3622
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Solns. of hexafluoroacetylacetone and a modifier such as, e.g., pyridine in supercrit. CO2 allow 97-99% removal of actinides from the stainless steel surface. The deactivation efficiencies were compared for liquid and supercrit. CO2. Single treatment run with solns. of HDEHP and DCH18C6 in liquid CO2 removes 70-80% of transuranium elements and over 50% of Sr and Cs from the stainless steel surface. Deactivation of real contaminated radioactive samples was studied. Methods such as supercrit. fluid extraction and extraction with liquid CO2 are suitable for deactivation of surfaces and porous materials.

IT **121-44-8**, Triethylamine, uses
RL: **MOA (Modifier or additive use); USES (Uses)**
(radioactive decontamination with sub- and supercrit. carbon dioxide)

RN 121-44-8 HCAPLUS

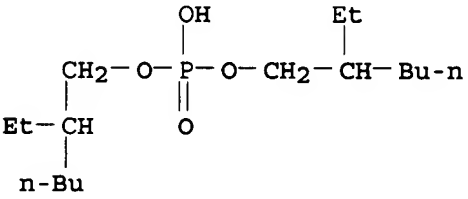
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **298-07-7**, HDEHP
RL: NUU (Other use, unclassified); **USES (Uses)**
(radioactive decontamination with sub- and supercrit. carbon dioxide)

RN 298-07-7 HCAPLUS

CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



CC 71-10 (Nuclear Technology)

IT 68-12-2, Dimethyl formamide, uses 93-60-7, Methyl 3-pyridinecarboxylate 108-48-5, 2,6-Dimethylpyridine 109-06-8, 2-Methylpyridine 110-86-1, Pyridine, uses **121-44-8**, Triethylamine, uses 121-69-7, Dimethylaniline, uses 2459-07-6, Methyl 2-pyridinecarboxylate 4096-20-2, N-Phenylpiperidine 6574-15-8, N-(4-Nitrophenyl)piperidine
RL: **MOA (Modifier or additive use); USES (Uses)**
(radioactive decontamination with sub- and supercrit. carbon dioxide)

IT 124-38-9, Carbon dioxide, uses **298-07-7**, HDEHP 1522-22-1, Hexafluoroacetylacetone 16069-36-6
RL: NUU (Other use, unclassified); **USES (Uses)**
(radioactive decontamination with sub- and supercrit. carbon dioxide)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

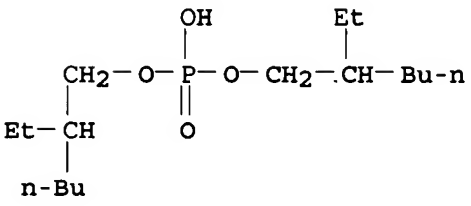
L40 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:737016 HCAPLUS
DOCUMENT NUMBER: 135:290256
TITLE: Acrylic polysiloxane compositions, their aqueous glossy coatings and compounding method therefor
INVENTOR(S): Kono, Yoshiyuki; Hatano, Takanori
PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001279160	A	20011010	JP 2000-95027	200003 30
			<--	
PRIORITY APPLN. INFO.:			JP 2000-95027	200003 30
			<--	

OTHER SOURCE(S): MARPAT 135:290256
AB Title compns. comprise (a) emulsions of polymers containing silyl groups R1aSiX13-a [R1 = C1-10 alkyl, C6-10 aryl, C7-10 aralkyl; X1 = halogen, (thio)alkoxy, OH, NH2, acyloxy, aminoxy, phenoxy; a = 0-2], (b) (R2O)4-bSiR3b (R2 = C1-10 alkyl, C6-10 aryl, C7-10 aralkyl, C1-4 acyl; R3 = C1-10 alkyl, C6-10 aryl, C7-10 aralkyl; b = 0-2) silicones and/or their partially hydrolyzates, and (c) acidic organic compds. and basic compds. at acid/base equiv ratio (A/B) of 1:0.01-3. Mixing a Bu acrylate-Bu methacrylate-iso-Bu methacrylate-Me methacrylate-triethoxysilylpropyl methacrylate-poly(ethylene glycol) monomethacrylate-Aqualon RN 30-Aqualon HS 0515 copolymer-containing emulsion with ESi 48, adding a pigments paste and additives, and further stirring with an aqueous mixture of DP 8R and DBU at A/B of 1:1.0 to form a coating showing good gloss, water-contact angle 47° initially and 45° after 3 mo at outdoor, low brightness deviation after 3 mo at outdoor, and good water and weather resistance.
IT **121-44-8**, Triethylamine, uses **298-07-7**, DP 8R
RL: **MOA (Modifier or additive use); USES (Uses)**
(acrylic polysiloxane compns. for glossy, hydrophilic, and antisoiling aqueous coatings and compounding method)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

RN 298-07-7 HCAPLUS

CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



IC ICM C09D143-04
ICS C09D005-02; C09D183-02; C09D183-06
CC 42-10 (Coatings, Inks, and Related Products)
IT 57-11-4, Stearic acid, uses **121-44-8**, Triethylamine, uses **298-07-7**, DP 8R 1336-21-6, Ammonia water 6674-22-2, DBU
RL: **MOA (Modifier or additive use); USES (Uses)**
(acrylic polysiloxane compns. for glossy, hydrophilic, and antisoiling aqueous coatings and compounding method)

L40 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:551932 HCAPLUS
DOCUMENT NUMBER: 135:138786
TITLE: Aqueous antisoiling coating compositions and compounding method therefor
INVENTOR(S): Kono, Yoshiyuki; Hatano, Takanori; Kusakabe, Masato
PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

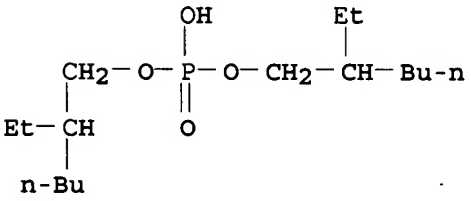
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001207117	A	20010731	JP 2000-16345	200001 25
			<--	
PRIORITY APPLN. INFO.:			JP 2000-16345	200001 25
			<--	

AB Title compns., with high gloss, contain (a) aqueous resin dispersions, (b) Si compds. (R1O)4-aSi(OR2)a (R1, R2 = C1-10 alkyl, C6-10 aryl, C7-10 aralkyl; a = 0-2) and/or their hydrolyzates, and (c) blends of organic acids and basic compds. at acid/base equivalent ratio (R) of 1/0.01. Adding a blend of aqueous NH3 and DP 8R at R of 1/0.3 into an aqueous composition containing Bu acrylate-Bu methacrylate-iso-Bu methacrylate-Me methacrylate-MA 100 copolymer and ESi 48 gave a coating, which was spread on a glass plate and aged at room temperature for 2 wk to form a film with water-contact angle 49° initially, 43° after soaking in water for 2 wk, and 49° after 3 mo at outdoor, brightness deviation 1.7 at 45° surface, and 60° gloss 82.0%.
IT **121-44-8**, Triethylamine, uses **298-07-7**, DP 8R

RL: **MOA (Modifier or additive use); USES (Uses)**
(aqueous acrylic coatings containing organic silicates and organic acid/base blends with hydrophilicity and gloss and soil resistance)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

RN 298-07-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



IC ICM C09D183-02
ICS C09D005-00; C09D133-06; C09D183-04
CC 42-10 (Coatings, Inks, and Related Products)
IT 57-11-4, Stearic acid, uses 78-10-4, Tetraethoxysilane
121-44-8, Triethylamine, uses **298-07-7**, DP 8R
1336-21-6, Ammonia water 11099-06-2
RL: **MOA (Modifier or additive use); USES (Uses)**
(aqueous acrylic coatings containing organic silicates and organic acid/base blends with hydrophilicity and gloss and soil resistance)

L40 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:517730 HCAPLUS
DOCUMENT NUMBER: 135:108668
TITLE: Water-thinned polymer coating compositions, their manufacture, and brightening agents
INVENTOR(S): Kono, Yoshiyuki; Hatano, Takanori; Kusakabe, Masato
PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001192620	A	20010717	JP 2000-335742	200011 02

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PRIORITY APPLN. INFO.: JP 1999-316052 A 199911 05

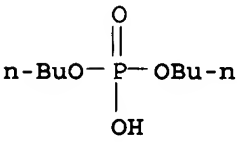
<--

OTHER SOURCE(S): MARPAT 135:108668

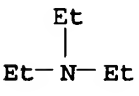
AB The compns. contain water-thinned polymer dispersions and brightening agents comprising acidic organic compds. and basic compds. at acid/base equivalent ratio 1/0.01-3. Thus, a composition containing 100 parts mixture of Odeflash Si-II (silicone-modified acrylic polymer coating) and an aqueous emulsion containing Bu acrylate-Me methacrylate-Bu methacrylate-iso-Bu methacrylate-triethoxysilylpropyl methacrylate-MA 100 (polyoxyethylene-containing vinyl monomer) copolymer and 5 parts brightening agent manufactured from di-Bu phosphate and 1,8-diazabicyclo[5.4.0]undec-7-ene was applied on a glass plate and dried to give a coating showing 20° gloss 62.8.

IT **107-66-4**, Dibutyl phosphate **121-44-8**, Triethylamine, uses **298-07-7**, Di(2-ethylhexyl) phosphate **1070-03-7**, Mono(2-ethylhexyl) phosphate
RL: **MOA (Modifier or additive use); USES (Uses)**
(brightening agents; manufacture of water-thinned polymer coating compns.)

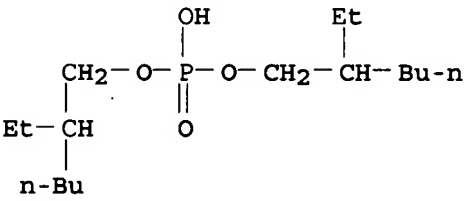
RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



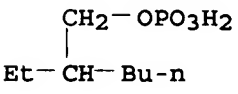
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



RN 298-07-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



RN 1070-03-7 HCAPLUS
CN Phosphoric acid, mono(2-ethylhexyl) ester (CA INDEX NAME)

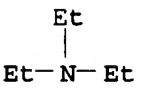


IC ICM C09D201-00
ICS C09D005-00; C09D007-12
CC 42-7 (Coatings, Inks, and Related Products)
IT 57-11-4, Stearic acid, uses **107-66-4**, Dibutyl phosphate **121-44-8**, Triethylamine, uses 151-41-7, Lauryl sulfate **298-07-7**, Di(2-ethylhexyl) phosphate **1070-03-7**, Mono(2-ethylhexyl) phosphate 6674-22-2, 1,8-Diazabicyclo-[5,4,0]-7-undecene 7664-41-7, Ammonia, uses 56572-86-2, Isodecyl phosphate
RL: **MOA (Modifier or additive use)**; **USES (Uses)**
(brightening agents; manufacture of water-thinned polymer coating compns.)

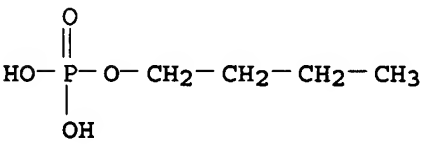
L40 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:294922 HCAPLUS
DOCUMENT NUMBER: 124:346157
TITLE: Water-based coating compositions
INVENTOR(S): Matsuide, Yasuhiro; Koshizawa, Shuichi; Iwahashi, Masanori; Sato, Taiji; Oohara, Shinichi
PATENT ASSIGNEE(S): Dainippon Ink & Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08034954	A	19960206	JP 1994-172435	19940725 <--
JP 3635682	B2	20050406		
PRIORITY APPLN. INFO.:			JP 1994-172435	19940725 <--

AB Title compns. with good water resistance, hardness, storability contain aqueous acrylic resins prepared from α,β-unsatd. carboxylic acids, aromatic vinyl monomers, and (meth)acrylamide-type monomers, phosphoric acid compds., and pigments. Thus, acrylic resin prepared from methacrylic acid 6.0, styrene 15.0, N-methoxymethylacrylamide 15.0, 2-hydroxyethyl methacrylate 5.0, and Et acrylate 59.0 parts 124.5, monobutyl phosphate 0.6, and CR 93 100 parts were mixed and kneaded to give a test piece showing good storability, water resistance, and hardness 4H.
IT **121-44-8DP**, Triethylamine, reaction products with modified phosphoric acids
RL: IMF (Industrial manufacture); **MOA (Modifier or additive use)**; PREP (Preparation); **USES (Uses)**
(water-based coatings containing acrylic resins, phosphoric acid compds., and pigments)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **1623-15-0**, Monobutyl phosphate
RL: **MOA (Modifier or additive use); USES (Uses)**
(water-based coatings containing acrylic resins, phosphoric acid compds., and pigments)
RN 1623-15-0 HCAPLUS
CN Phosphoric acid, monobutyl ester (CA INDEX NAME)



IC ICM C09D133-02
ICS C09D125-08; C09D133-26
CC 42-7 (Coatings, Inks, and Related Products)
IT **121-44-8DP**, Triethylamine, reaction products with modified phosphoric acids
RL: IMF (Industrial manufacture); **MOA (Modifier or additive use)**; PREP (Preparation); **USES (Uses)**
(water-based coatings containing acrylic resins, phosphoric acid compds., and pigments)
IT **1623-15-0**, Monobutyl phosphate
RL: **MOA (Modifier or additive use); USES (Uses)**
(water-based coatings containing acrylic resins, phosphoric acid compds., and pigments)

L40 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:167703 HCAPLUS
DOCUMENT NUMBER: 124:204000
TITLE: Transparent, rigid, heat-resistant, and resilient crystalline polyolefin compositions
INVENTOR(S): Nakajima, Yoichi
PATENT ASSIGNEE(S): Chisso Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07330963	A	19951219	JP 1994-175946	19940704
JP 3805388	B2	20060802	<--	

PRIORITY APPLN. INFO.: JP 1994-95876 A 19940408

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JP 1994-95877 A 199404 08
<--
JP 1994-99332 A 199404 12
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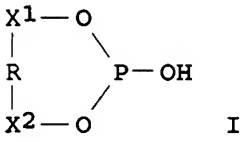
OTHER SOURCE(S): MARPAT 124:204000
GI

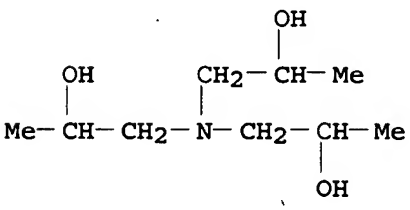


I

AB The title compns. comprise Mg halide catalyst residue-containing crystalline polyolefins (e.g., polypropylene, ethylene-propylene copolymer), 0.001-1 phr cyclic P compds. I [R = C1-4 alkylidene; X1-2 = (cyclo)alkylarylene, ar(alk)ylarylene], and 0.001-1 phr halogen adsorbers (e.g., aliphatic acid salts, alkanoyl lactic salts, aliphatic hydroxyacid salts, etc.).

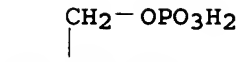
IT **122-20-3**, Triisopropanolamine
RL: **MOA (Modifier or additive use); USES (Uses)**
(halogen adsorbers; transparent, rigid, heat-resistant, and resilient crystalline polyolefin compns.)

RN 122-20-3 HCAPLUS
CN 2-Propanol, 1,1',1''-nitrilotris- (CA INDEX NAME)



IT **116338-80-8**
RL: **MOA (Modifier or additive use); USES (Uses)**
(transparent, rigid, heat-resistant, and resilient crystalline polyolefin compns.)

RN 116338-80-8 HCAPLUS
CN Phosphoric acid, mono(2-ethylhexyl) ester, magnesium salt (1:1) (9CI) (CA INDEX NAME)



IC ICM C08L023-00
ICS C08K005-00; C08K005-527
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 28
IT 68-04-2, Sodium citrate 100-97-0, Hexamethylenetetramine, uses 108-78-1, 2,4,6-Triamino-1,3,5-triazine, uses 110-30-5, N,N'-Ethylenebisstearamide 112-84-5, Erucamide **122-20-3**, Triisopropanolamine 301-02-0, Oleamide 471-34-1, Calcium carbonate, uses 546-89-4, Lithium acetate 551-64-4, Zinc tartrate 814-80-2, Calcium lactate 1309-42-8, Magnesium hydroxide 1314-13-2, Zinc oxide, uses 1592-23-0, Calcium stearate 4508-49-0 4615-31-0, Zinc stearyl phosphate 11097-59-9, DHT-4A 39663-84-8, Lithium glycolate 51568-80-0, Calcium stearyl phosphate 52497-24-2 52829-07-9, Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 57532-25-9, Magnesium 12-hydroxyoctadecanoate 71878-19-8 85209-91-2, Sodium 2,2'-methylenebis(4,6-di-tert-butylphenyl) phosphate 90751-07-8 94945-28-5 106990-43-6 121236-27-9, Zinc montanate 173050-47-0
RL: **MOA (Modifier or additive use); USES (Uses)**
(halogen adsorbers; transparent, rigid, heat-resistant, and resilient crystalline polyolefin compns.)
IT 72-17-3, Sodium lactate 127-09-3, Sodium acetate 142-72-3, Magnesium acetate 546-93-0, Magnesium carbonate 557-04-0, Magnesium stearate 822-16-2, Sodium stearate 868-18-8, Sodium tartrate 1309-48-4, Magnesium oxide, uses 1555-53-9, Magnesium oleate 2836-32-0, Sodium glycolate 13329-67-4, Sodium 12-hydroxyoctadecanoate 15233-97-3 18200-72-1 25728-82-9, Sodium montanate 43168-33-8, Magnesium behenate 52258-46-5, Magnesium montanate 111010-83-4 **116338-80-8** 118337-09-0, 2,2'-Ethylidenebis(4,6-di-tert-butylphenyl) fluorophosphite 119735-73-8 119735-74-9 122757-26-0, 2,2'-Methylenebis(4,6-di-tert-butylphenyl) fluorophosphite 123651-05-8 133940-41-7 133949-89-0 147025-23-8 165597-51-3 165597-52-4 165597-53-5 165597-54-6 165597-55-7 165597-56-8 165597-57-9 165597-58-0 165597-59-1 165597-60-4 165597-61-5 174495-68-2 174495-69-3 174495-70-6 174495-71-7 174495-72-8 174495-73-9
RL: **MOA (Modifier or additive use); USES (Uses)**
(transparent, rigid, heat-resistant, and resilient crystalline polyolefin compns.)

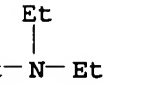
L40 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:777040 HCAPLUS
DOCUMENT NUMBER: 123:339057
TITLE: Direct anodic oxidation of p-methoxytoluene in methanol. Effect of electrolysis conditions
AUTHOR(S): Ogibin, Yu. N.; Ilovaisky, A. I.; Merkulova, V. M.; Nikishin, G. I.
CORPORATE SOURCE: N. D. Zelinsky Institute Organic Chemistry, Russian Academy Sciences, Moscow, 117913, Russia

SOURCE: Izvestiya Akademii Nauk, Seriya Khimicheskaya (**1995**), (3), 524-7
CODEN: IASKEA
PUBLISHER: Nauka
DOCUMENT TYPE: Journal
LANGUAGE: Russian

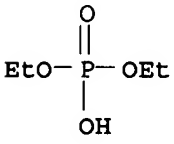
AB The effect of anions of supporting electrolytes (F-, dialkylphosphate, TsO- and BF4-) on the selectivity of direct anodic oxidation of p-methoxytoluene (PMT) to 4-methoxybenzaldehyde dimethylacetal in MeOH was studied. The best results was observed with F-.

IT **121-44-8**, Triethylamine, uses **2870-30-6**, Sodium diethyl phosphate **16298-74-1**, Sodium dibutyl phosphate
RL: NUU (Other use, unclassified); **USES (Uses)**
(anion effect on anodic oxidation of methoxytoluene)

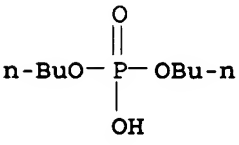
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



RN 2870-30-6 HCAPLUS
CN Phosphoric acid, diethyl ester, sodium salt (1:1) (CA INDEX NAME)



RN 16298-74-1 HCAPLUS
CN Phosphoric acid, dibutyl ester, sodium salt (1:1) (CA INDEX NAME)



CC 22-13 (Physical Organic Chemistry)
Section cross-reference(s): 25, 72

IT **121-44-8**, Triethylamine, uses 149-73-5, Trimethoxymethane 429-42-5, Tetrabutylammonium tetrafluoroborate 733-44-8, Tetraethylammonium tosylate **2870-30-6**, Sodium diethyl phosphate 7789-23-3, Potassium fluoride 15404-00-9,

4-Methylbenzenesulfonic acid compound with Triethylamine 16106-44-8, Potassium tosylate **16298-74-1**, Sodium dibutyl phosphate
RL: NUU (Other use, unclassified); **USES (Uses)**
(anion effect on anodic oxidation of methoxytoluene)

L40 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:729796 HCAPLUS
DOCUMENT NUMBER: 123:289459
TITLE: Phosphorus-containing polyester fibers, fabrics, and their dyeing process
INVENTOR(S): Matsuoka, Takeshi; Araki, Yoshio; Ooguchi, Masakatsu
PATENT ASSIGNEE(S): Toyo Boseki, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07118924	A	19950509	JP 1993-272033	199310 29

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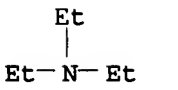
PRIORITY APPLN. INFO.: JP 1993-272033 199310 29

<--

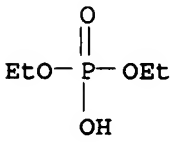
AB The title polyester fibers with retention of strength ≥80% are mainly composed of ethylene terephthalate as structure units and containing 0.05-4.0% (based on P) compds. selected from P(O)(OR1)(OR2)(OR3), P(O)R4(OR2)(OR3), and P(O)R4(OR2)(AR5) (I) (R1-3 = H, C1-18 monovalent organic group; R4 = C1-18 monovalent organic group; R5 = monovalent ester-formable functional group; A = C1-18 divalent organic group; I may form cyclic anhydrides in the mol.). The fibers and fabrics are dyed in a liquid with pH 5.0-6.5 in the presence of amine acetic acid salts. Thus, 1297 parts terephthalic acid and 1067 parts ethylene glycol were transesterified at 230° in the presence of Et3N and Sb2O3 under H2O removal, blended with 11 parts of a 53:47 mixture of mono-Et phosphate and di-Et phosphate, stirred at 230° for 20 min, and polycondensed at 275° to give a polymer with intrinsic viscosity 0.57 containing P 0.57. A fabric obtained from the polymer was dyed in a bath containing 1.0% owf Dianix Blue AC-E 1 g/L Disper TL, mixture of AcOH, NaOAc, and buffer, and 6.0+10-3 mol/L cyclohexylamine acetate at bath ratio 1:100 and at 130° for 1 h to give a test piece with good color.

IT **121-44-8**, Triethylamine, uses
RL: **MOA (Modifier or additive use); USES (Uses)**
(P-containing PET-type polyester fibers and dyeing in presence of amine acetic acid salts)

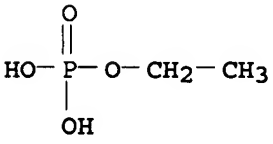
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **598-02-7D**, Diethyl phosphate, reaction products with poly(ethylene terephthalate) **1623-14-9D**, Monoethyl phosphate, reaction products with poly(ethylene terephthalate)
RL: TEM (Technical or engineered material use); **USES (Uses)**
(P-containing PET-type polyester fibers and dyeing in presence of amine acetic acid salts)
RN 598-02-7 HCAPLUS
CN Phosphoric acid, diethyl ester (CA INDEX NAME)



RN 1623-14-9 HCAPLUS
CN Phosphoric acid, monoethyl ester (CA INDEX NAME)



IC ICM D01F006-84
ICS D03D015-00; D04B001-16; D06P003-52
ICA C08G063-692
CC 40-2 (Textiles and Fibers)
IT **121-44-8**, Triethylamine, uses 1641-36-7 5153-63-9 7346-79-4
RL: **MOA (Modifier or additive use); USES (Uses)**
(P-containing PET-type polyester fibers and dyeing in presence of amine acetic acid salts)
IT **598-02-7D**, Diethyl phosphate, reaction products with poly(ethylene terephthalate) **1623-14-9D**, Monoethyl phosphate, reaction products with poly(ethylene terephthalate) 25038-59-9D, PET, phosphorus-containing
RL: TEM (Technical or engineered material use); **USES (Uses)**
(P-containing PET-type polyester fibers and dyeing in presence of amine acetic acid salts)

L40 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:661100 HCAPLUS
DOCUMENT NUMBER: 123:130110
TITLE: Adhesive composition for printed wiring boards, laminates using it, and production of the wiring boards
INVENTOR(S): Takanezawa, Shin; Irino, Teturou; Toshaka, Yuuji; Kagaya, Takashi
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5419946	A	19950530	US 1994-314774	19940929
JP 07170066	A	19950704	JP 1994-231959	19940928
JP 3536937	B2	20040614		

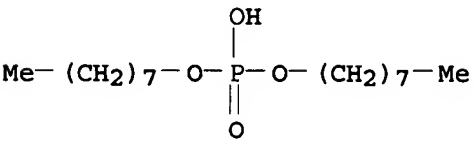
PRIORITY APPLN. INFO.: JP 1993-243455 A 19930930

AB An adhesive composition containing a special internal mold release agent obtained from tri-, di-, or monoalkyl phosphates, the alkyl moiety having 6-18 C atoms, and an amine in addition to major components of an epoxy resin, acrylonitrile-butadiene rubber, an alkylphenol resin, and an inorg. filler is suitable for producing printed wiring boards by an additive process having excellent adhesion to plated Cu.

IT **121-44-8**, Triethylamine, processes **3115-39-7**, Dioctyl phosphate
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); **USES (Uses)**
(adhesive composition for printed wiring boards containing)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

RN 3115-39-7 HCAPLUS
CN Phosphoric acid, dioctyl ester (CA INDEX NAME)



IC ICM B05D005-12
ICS B05D003-10; B32B005-16
INCL 428206000
CC 76-14 (Electric Phenomena)
IT 102-71-6, Triethanolamine, processes **121-44-8**,

Triethylamine, processes 141-43-5, Monoethanolamine, processes 682-49-5, Trilauryl phosphate 2958-09-0, Monostearyl phosphate **3115-39-7**, Dioctyl phosphate
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); **USES (Uses)**
(adhesive composition for printed wiring boards containing)

L40 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:661097 HCAPLUS
DOCUMENT NUMBER: 123:231522
TITLE: Thermosetting compositions, thermal latent acid catalysts, methods of coating and coated articles with good physicochem. properties, weather resistance and storage stability
INVENTOR(S): Ishidoya, Masahiro; Shibato, Kishio; Komoto, Keiji; Shibamoto, Kenji; Mashita, Mitsuyuki; Ohe, Osamu
PATENT ASSIGNEE(S): Nippon Oil and Fats Co., Ltd., Japan
SOURCE: U.S., 32 pp. Cont.-in-part of U.S. 5,352,740.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5419929	A	19950530	US 1992-948017	19920921
JP 04218561	A	19920810	JP 1991-89510 <--	19910328
US 5352740	A	19941004	US 1991-680356 <--	19910404
CA 2040167	A1	19911011	CA 1991-2040167 <--	19910410
CA 2040167	C	19971216		
JP 05320529	A	19931203	JP 1992-255847 <--	19920831
JP 2746005	B2	19980428		
US 5516839	A	19960514	US 1994-260002 <--	19940615
US 5549932	A	19960827	US 1995-401198 <--	19950309
US 5660937	A	19970826	US 1995-401368	

					199503 09
			<--		
US 5521011	A	19960528	US 1995-444160		
					199505 18
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US 5578677	A	19961126	US 1995-578083		
					199512 27
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PRIORITY APPLN. INFO.:			JP 1990-94267	A	
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			JP 1990-259695	A	
					199009 28
			<--		
			JP 1990-288776	A	
					199010 26
			<--		
			JP 1991-89510	A	
					199103 28
			<--		
			US 1991-680356	A2	
					199104 04
			<--		
			JP 1991-283514	A	
					199110 03
			<--		
			JP 1991-283515	A	
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			JP 1991-287129	A	
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			JP 1991-287130	A	
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			JP 1992-91985	A	
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			JP 1992-92240	A	
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			JP 1992-97055	A	
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JP 1992-97058	A	
		199203
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JP 1992-255847	A	
		199208
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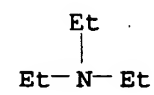
US 1992-948017	A3	
		199209
		21
	<--	
US 1994-260002	A3	
		199406
		15
	<--	

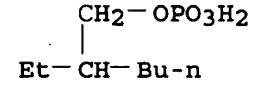
AB Thermosetting composition comprises a compound having ≥2 carboxyl groups blocked by a vinyl (thio)ether or a heterocyclic compound having a vinyl type double bond and O or S as the hetero atom, a compound having ≥2 reactive groups which can form a chemical bond with the blocked carboxyl compound by heating, a specific vinyl (thio)ether, and optionally a thermal latent acid catalyst. The blocked carboxyl group of the first compound and the reactive functional group of the second compound may be in the same mol. A component compound was prepared by polymerization of methacrylic acid-Et vinyl ether reaction product (acid value <30) 167.2, Bu methacrylate 100, Me methacrylate 178.6, and 2-ethylhexyl acrylate 135.4 parts. A coating composition curable in 30 min at 120° comprised the above component compound 100, Denacol EX-421 15.5, titania 52.4, Moadaflow 0.3, xylene 7, BuOAc 2, and Pr vinyl ether 3.6 parts.

IT **121-44-8**, Triethylamine, uses **1070-03-7**
RL: CAT (Catalyst use); **USES (Uses)**
(thermosetting compns., thermal latent acid catalysts, methods of coating and coated articles with good physicochem. properties, weather resistance and storage stability)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



RN 1070-03-7 HCAPLUS
CN Phosphoric acid, mono(2-ethylhexyl) ester (CA INDEX NAME)



IC ICM C08L029-00
ICS C08L033-00; C08L037-00; C08L067-02
INCL 427386000
CC 42-10 (Coatings, Inks, and Related Products)

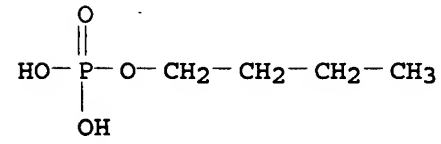
IT 78-40-0, Triethyl phosphate 104-15-4, uses 109-02-4, N-Methylmorpholine 110-86-1, Pyridine, uses **121-44-8**, Triethylamine, uses 149-57-5, 2-Ethylhexanoic acid 557-09-5, Zinc octanoate **1070-03-7** 7646-85-7, Zinc chloride, uses 7699-45-8, Zinc bromide 10041-19-7, Bis(2-ethylhexyl) sulfosuccinate 120326-69-4, Dodecylbenzenesulfonic acid N-methylmorpholine salt
RL: CAT (Catalyst use); **USES (Uses)**
(thermosetting compns., thermal latent acid catalysts, methods of coating and coated articles with good physicochem. properties, weather resistance and storage stability)

L40 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:561652 HCAPLUS
DOCUMENT NUMBER: 123:145729
TITLE: Curable polymer compositions with good storage stability
INVENTOR(S): Ando, Naotami; Nakayama, Kazuya; Hatano, Takanori
PATENT ASSIGNEE(S): Kanegafuchi Chemical Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07053881	A	19950228	JP 1993-203337	199308 17 <--
JP 3357929	B2	20021216		
PRIORITY APPLN. INFO.:			JP 1993-203337	199308 17 <--

AB Title compns., giving crack-resistant coatings, comprise (A) polymer emulsions containing SiR1aX13-a (R1 = C1-10 alkyl, aryl, aralkyl; X1 = halo, alkoxy, OH, acyloxy, aminoxy, phenoxy, thioalkoxy, NH2; a = 0-2) and (B) mixts. or reaction products of water-soluble acidic phosphoric acid esters and amines. Thus, 10 parts 40%-solid copolymer emulsion of γ-methacryloxypropyltrimethoxysilane, Bu methacrylate, Me methacrylate, and Bu acrylate and 0.1 part mixture of MP 4 and 3-amino-1-propanol were mixed to give a composition showing viscosity 20 cP initially and 26 cP after 1 mo at 50°, which was applied on a glass sheet to give a film without cracks.
IT **121-44-8**, uses **1623-15-0**, MP 4
RL: TEM (Technical or engineered material use); **USES (Uses)**
(crosslinking agents; curable silyl-containing polymer emulsions with good storage stability for crack-resistant coatings)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

RN 1623-15-0 HCAPLUS
CN Phosphoric acid, monobutyl ester (CA INDEX NAME)



IC ICM C08L101-10
ICS C08K005-17; C08K005-521
ICA C08F030-08
CC 37-6 (Plastics Manufacture and Processing)
Section cross-reference(s): 42
IT **121-44-8**, uses 156-87-6 **1623-15-0**, MP 4
76483-21-1, AP 3 (phosphate)
RL: TEM (Technical or engineered material use); **USES (Uses)**
(crosslinking agents; curable silyl-containing polymer emulsions with good storage stability for crack-resistant coatings)

L40 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:511265 HCAPLUS
DOCUMENT NUMBER: 121:111265
TITLE: Two-part, room-temperature-curable silicone compositions
INVENTOR(S): Somemiya, Toshio; Makino, Zyunzo
PATENT ASSIGNEE(S): Cemedine Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

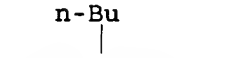
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 563894	A1	19931006	EP 1993-105273	199303 30
			<--	
EP 563894	B1	19980107		
R: DE, FR, GB				
JP 05331447	A	19931214	JP 1993-5755	199301 18
			<--	
JP 3332438	B2	20021007		
PRIORITY APPLN. INFO.:			JP 1992-76937 A	199203 31
			<--	

JP 1993-5755 A
199301
18
<--

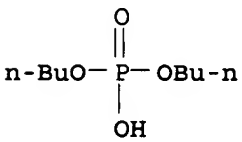
AB Title compns., useful for adhesives, coatings, gap-fillers, and casting materials, contain high-mol.-weight reactive silicone and polymerization promoter for radically polymerizing monomer in 1 component and a radically polymerizing monomer, polymerization initiator, and a curing promoter for the high-mol.-weight reactive silicone in the other component. These compns. are rapidly curing and the cured products have flexibility equivalent to rubbers. Thus, a composition containing Silicone S-303 100, dicyclopentenyl methacrylate (I) 20, and cumene hydroperoxide 2 parts was mixed in a 1:1 ratio with a composition containing I 50, 2-hydroxypropyl methacrylate 50, V acetylacetonate 0.05, hydroquinone 0.5, and 2-methacryloyloxyethyl phosphate 2 parts to give composition that exhibited setting time 6 min as an adhesive between steel plates, good flexibility as a coating on the steel plates, and uniform cure over the entire sample at the same time.

IT **102-82-9**, Tributylamine **107-66-4**, Dibutyl phosphate
RL: **USES (Uses)**
(vulcanization accelerators, for 2-part room-temperature-curable silicone rubber compns. containing (meth)acrylates)

RN 102-82-9 HCAPLUS
CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)



RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



IC ICM C08F299-08
CC 39-10 (Synthetic Elastomers and Natural Rubber)
Section cross-reference(s): 38, 42

IT 67-51-6, 3,5-Dimethylpyrazole 77-58-7, Dibutyltin dilaurate 80-15-9, Cumene hydroperoxide 81-07-2, Saccharin 89-25-8, 3-Methyl-1-phenyl-5-pyrazolone 94-36-0, Benzoyl peroxide, uses 96-27-5 96-45-7, Ethylenethiourea 99-97-8, N,N-Dimethyl-p-toluidine **102-82-9**, Tributylamine **107-66-4**, Dibutyl phosphate 919-30-2 1338-23-4, Methyl ethyl ketone peroxide 2530-85-0 4253-22-9, Dibutyltin sulfide 7440-48-4D, Cobalt, naphthenic acid salts 13476-99-8, Vanadium acetylacetonate 22221-10-9, Copper 2-ethylhexanoate 24599-21-1 52628-03-2, 2-Methacryloyloxyethyl phosphate 83590-14-1, Vanox 808 154839-74-4
RL: **USES (Uses)**
(vulcanization accelerators, for 2-part room-temperature-curable silicone rubber compns. containing (meth)acrylates)

L40 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:196350 HCAPLUS
DOCUMENT NUMBER: 116:196350
TITLE: Lactone-modified alicyclic composition, and an epoxidized composition thereof
INVENTOR(S): Fujiwa, Takaaki; Takemoto, Shin; Isobe, Tomohisa; Harano, Yoshiyuki
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 466596	A2	19920115	EP 1991-401935	199107 10
			<--	
EP 466596	A3	19920916		
EP 466596	B1	19941005		
R: CH, DE, FR, GB, IT, LI, NL				
JP 04069360	A	19920304	JP 1990-182124	199007 10
			<--	
JP 2926262	B2	19990728		
JP 04100819	A	19920402	JP 1990-216569	199008 17
			<--	
JP 2916941	B2	19990705		
JP 04170411	A	19920618	JP 1990-298482	199011 02
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JP 2962805	B2	19991012		
JP 04178378	A	19920625	JP 1990-305829	199011 09
			<--	
JP 2869753	B2	19990310		
US 5169965	A	19921208	US 1991-728114	199107 10
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US 5198509	A	19930330	US 1992-895360	199206 08
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US 5338879	A	19940816	US 1992-930094	199208 13
			<--	
JP 11152251	A	19990608	JP 1998-273810	199809

28
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JP 3016428 B2 20000306

PRIORITY APPLN. INFO.: JP 1990-182124 A 19900710
<--
JP 1990-216569 A 19900817
<--
JP 1990-298482 A 19901102
<--
JP 1990-305829 A 19901109
<--
US 1991-728114 A3 19910710
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US 1992-895360 A3 19920608
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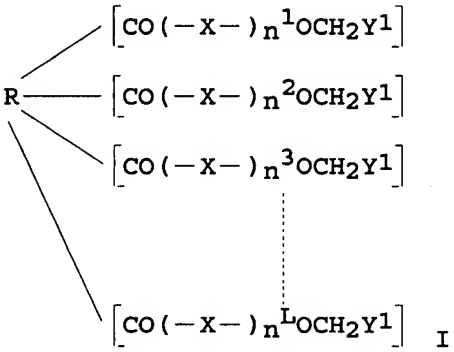
GI



I

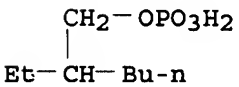
AB Title lactone-modified compns. comprise I (R = C1-30 alkyl, aromatic, or alkenyl; Y1 = ≥1 of 3-cyclohexenyl, 1-methyl-3-cyclohexenyl, 6-methyl-3-cyclohexenyl; X = lactone-derived group O(CR1R2)cCO and/or O(CR1R2)dCO where R1, R2 are independently H and Me, c and d are independently 4-8 integers, and n1 to nL is ≥0, resp., n1 + n2 + n3 ... nL is ≥1, which correspond to total moles lactone introduced, L = ≥2). In I, ≥1 of Y1 can be epoxidized. The compns. are heat-curable, photocurable, or photo-cationically curable. Thus, a caprolactone is adducted with 3-cyclohexene-1-methanol (II) and the adduct is reacted with 1,2,3,4-butanetetracarboxylic acid to give I (n1 + n2 + n3 + n4 = 3 and Y1 = 3-cyclohexenyl) (III). III under N in EtOAc was epoxidized with AcOOH in presence of 2-ethylhexyl Na tripolyphosphate at 40° to give product by epoxidn. of the

cyclohexenyl rings. The epoxy compds. were photocurable with Degacure K126 (photo-cationic initiator) at 80 W/cm at 6.5 cm for 100 s to give a cured plate or the epoxy compds. were used in coatings.

IT **31044-12-9**, Sodium 2-ethylhexyl phosphate
RL: **USES (Uses)**
(additives, for epoxidn. of lactone-modified alicyclic compds.)

RN 31044-12-9 HCAPLUS

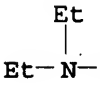
CN Phosphoric acid, mono(2-ethylhexyl) ester, sodium salt (1:?) (CA INDEX NAME)



IT **121-44-8**, Triethylamine, uses
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for reaction of acrylic acids with epoxy compds.)

RN 121-44-8 HCAPLUS

CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC ICM C07C069-608
ICS C07D303-40; C07C069-34; C07C067-02; C07D301-03; C08G059-20

CC 42-9 (Coatings, Inks, and Related Products)
Section cross-reference(s): 35

IT 1693-78-3, 2-Ethylhexyl pyrophosphate 2466-09-3, Pyrophosphoric acid 7320-34-5, Potassium pyrophosphate 7632-05-5, Sodium phosphate 7664-38-2, Phosphoric acid, miscellaneous 7722-88-5 7758-29-4, Sodium tripolyphosphate 7783-28-0, Ammonium hydrogen phosphate 10380-08-2, Tripolyphosphoric acid 13845-36-8, Potassium tripolyphosphate 16068-46-5, Potassium phosphate **31044-12-9**, Sodium 2-ethylhexyl phosphate 68550-93-6
RL: **USES (Uses)**
(additives, for epoxidn. of lactone-modified alicyclic compds.)

IT **121-44-8**, Triethylamine, uses
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for reaction of acrylic acids with epoxy compds.)

L40 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:231898 HCAPLUS

DOCUMENT NUMBER: 114:231898

TITLE: Lubricating oil composition

INVENTOR(S): Yamazaki, Akira; Kawaji, Isamu; Sakakibara, Tadamori

PATENT ASSIGNEE(S): Tonen Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

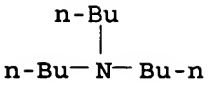
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 407124	A1	19910109	EP 1990-307209	199007 02
			<--	
R: DE, FR, GB				
JP 03039396	A	19910220	JP 1989-174259	198907 07
			<--	
JP 03039397	A	19910220	JP 1989-174260	198907 07
			<--	
JP 03039400	A	19910220	JP 1989-174261	198907 07
			<--	
JP 03039398	A	19910220	JP 1989-174262	198907 07
			<--	
JP 2845498	B2	19990113		
PRIORITY APPLN. INFO.:			JP 1989-174259 A	198907 07
			<--	
			JP 1989-174260 A	198907 07
			<--	
			JP 1989-174261 A	198907 07
			<--	
			JP 1989-174262 A	198907 07
			<--	

OTHER SOURCE(S): MARPAT 114:231898

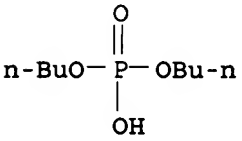
AB A lubricating oil composition is prepared by incorporating a phosphoric acid ester, a phosphorous acid ester, and their amine salts and an aliphatic dicarboxylic acid into a base oil, or further incorporating an alkylamine and/or succinimide or perbasic Mg or Ca sulfonate. The lubricating oil can be used for automatic transmission of an automobile.

IT **102-82-9**, Tributylamine **107-66-4**, Dibutylphosphate **107-66-4D**, Dibutylphosphate, amine salts **3115-39-7**, Dioctyl phosphate **7057-92-3**, Dilauryl phosphate
RL: **USES (Uses)**
(friction modifier, lubricating oils containing, for automatic transmission)

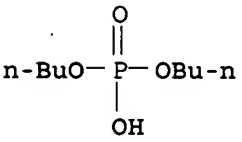
RN 102-82-9 HCAPLUS
CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)



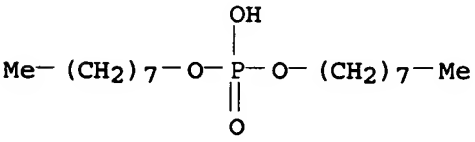
RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



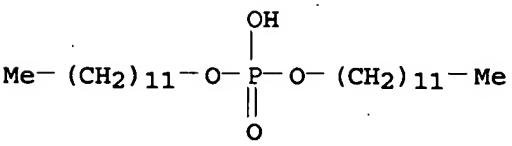
RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



RN 3115-39-7 HCAPLUS
CN Phosphoric acid, dioctyl ester (CA INDEX NAME)



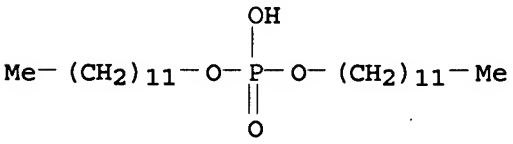
RN 7057-92-3 HCAPLUS
CN Phosphoric acid, didodecyl ester (CA INDEX NAME)



IT **2627-35-2D**, Monolaurylphosphate, amine salts
7057-92-3D, Dilauryl phosphate, amine salts
RL: **USES (Uses)**
(friction modifiers, lubricating oils containing, for automatic transmission)
RN 2627-35-2 HCAPLUS
CN Phosphoric acid, monododecyl ester (CA INDEX NAME)

$H_2O_3PO-(CH_2)_{11}-Me$

RN 7057-92-3 HCAPLUS
CN Phosphoric acid, didodecyl ester (CA INDEX NAME)



IC ICM C10M141-10
ICS C10M163-00; C10M169-04
ICI C10M141-10, C10M129-42, C10M129-76, C10M133-04, C10M133-56, C10M135-24, C10M137-02, C10M137-04, C10M137-08; C10M163-00, C10M129-42, C10M129-76, C10M133-04, C10M133-56, C10M135-24, C10M137-02, C10M137-04
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT 102-79-4, Butyldiethanolamine **102-82-9**, Tributylamine 102-86-3, Trihexylamine 102-87-4, Trilaurylamine 102-88-5, Tristearylamine **107-66-4**, Dibutylphosphate **107-66-4D**, Dibutylphosphate, amine salts 109-73-9, Butylamine, uses and miscellaneous 110-58-7, Pentylamine 111-16-0, Heptanedioic acid 111-20-6, Decanedioic acid, uses and miscellaneous 111-26-2, Hexylamine 111-42-2, Diethanolamine, uses and miscellaneous 111-86-4, Octylamine 111-92-2, Dibutylamine 112-90-3, Oleylamine 112-99-2, Distearylamine 120-07-0, Phenyldiethanolamine 122-98-5 123-99-9, Azelaic acid, uses and miscellaneous 124-04-9, Hexanedioic acid, uses and miscellaneous 124-22-1, Laurylamine 124-30-1, Stearylamine 143-16-8, Dihexylamine 505-48-6, Suberic acid 621-77-2, Tripentylamine 693-23-2, Dodecanedioic acid 821-38-5, Tetradecanedioic acid 871-70-5, Octadecanedioic acid 1116-76-3, Trioctylamine 1120-48-5, Dioctylamine 1541-67-9, Lauryldiethanolamine 2050-51-3 2050-92-2, Dipentylamine 2424-92-2, Eicosanedioic acid 3007-31-6, Dilaurylamine **3115-39-7**, Dioctyl phosphate 5345-94-8 6708-53-8, Triacontanedioic acid **7057-92-3**, Dilauryl phosphate 7722-71-6 13127-82-7 14450-07-8, Dioleyl phosphate 15196-28-8 21514-82-9 31314-15-5 31314-16-6 31314-17-7 35841-98-6 37519-50-9 68810-31-1, Dipropanolamine 72648-60-3 132935-41-2 132950-91-5 133119-26-3 133119-27-4 133119-28-5 133946-85-7
RL: **USES (Uses)**
(friction modifier, lubricating oils containing, for automatic transmission)
IT **2627-35-2D**, Monolaurylphosphate, amine salts **7057-92-3D**, Dilauryl phosphate, amine salts 7664-38-2D, Phosphoric acid, monoalkyl esters, amine salts 14450-07-8D, Dioleyl phosphate, amine salts
RL: **USES (Uses)**
(friction modifiers, lubricating oils containing, for automatic transmission)

L40 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:8026 HCAPLUS
DOCUMENT NUMBER: 114:8026
TITLE: Coextrudable polyolefin adhesive compositions

and their use
INVENTOR(S): Wong, Chun Sing
PATENT ASSIGNEE(S): Du Pont Canada, Inc., Can.
SOURCE: Brit. UK Pat. Appl., 19 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

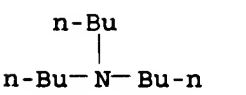
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2228488	A	19900829	GB 1989-4438	198902 27
			<--	
GB 2228488	B	19920325		
CA 2010839	A1	19900827	CA 1990-2010839	199002 23
			<--	
US 5115033	A	19920519	US 1990-485708	199002 27
			<--	

PRIORITY APPLN. INFO.: GB 1989-4438 A 198902 27
<--

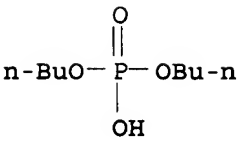
AB The title adhesives, useful for bonding dissimilar materials (especially polar and nonpolar polymers), contain C2H4-unsatd. carboxylic acid copolymers, their metal salts, or polyolefins grafted with unsatd. carboxylic acids or anhydrides; and adhesion promoters (alkyl phosphates, alkylamines, heterocyclic amines, or amino acids or their salts). Thus, coextruding a mixture of linear low-d. polyethylene (I), maleated (1%) I, and 50 ppm Bu3N with C2H4-vinyl alc. copolymer at 200-210° gave a film with 180° peel adhesion 240 g/cm; vs. 105 without Bu3N.

IT **102-82-9**, Tributylamine **107-66-4**, Dibutylphosphate
RL: **USES (Uses)**
(couplers, for polyolefin blend adhesives)

RN 102-82-9 HCAPLUS
CN 1-Butanamine, N,N-dibutyl- (CA INDEX NAME)

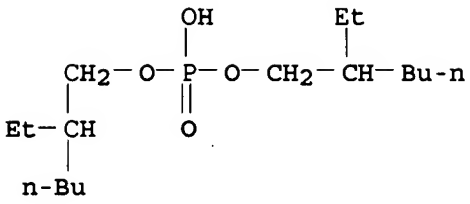


RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



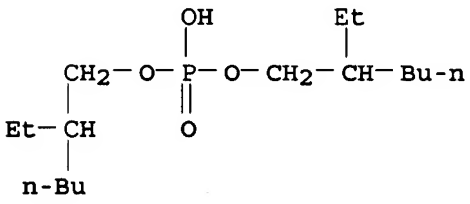
IC ICM C09J123-00
ICS C08K005-17; C08K005-34; C08K005-52; C08K005-521; C08L023-00
CC 38-3 (Plastics Fabrication and Uses)
IT 51-17-2, Benzimidazole 71-00-1, L-Histidine, uses and miscellaneous 91-22-5, Quinoline, uses and miscellaneous **102-82-9**, Tributylamine **107-66-4**, Dibutylphosphate 1116-76-3 6000-44-8, Glycine sodium salt 7664-38-2D, Phosphoric acid, alkyl esters
RL: **USES (Uses)**
(couplers, for polyolefin blend adhesives)

L40 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:632114 HCAPLUS
DOCUMENT NUMBER: 113:232114
TITLE: Homogeneous rare earth coordination catalysts for copolymerization of styrene with acrylonitrile
AUTHOR(S): Yang, Mujie; Xu, Jinlong; Shen, Zhiquan
CORPORATE SOURCE: Dep. Chem., Zhejiang Univ., Hangzhou, Peop. Rep. China
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry (**1990**), 28(12), 3231-40
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Acrylonitrile (I) was polymerized with styrene (II) in presence of homogeneous rare earth coordination catalysts, ML3-Al(iso-Bu)3-CCl4, where M is a lanthanide metal and L is a ligand. The kinetics of the polymerization in presence of Nd phosphonate-Al(iso-Bu)3-CCl4 catalysts were determined The catalytic activity of rare earth elements in lanthanide phosphonate-containing catalysts and ligands in NdL3-containing catalysts for the copolymn. were in the following orders: Yb > Er > Tb .apprx. Tm > Ho > Ce > Lu .apprx. Sm .apprx. La > Pr > Nd, and Nd (naphthenate)3 > Nd phosphonates > Nd (acetylacetonate)3, resp. The I-II copolymers had alternating structure and softening points of 195-230°.
IT **23184-57-8 26312-52-7 38326-04-4 38326-05-5 45324-94-5 45324-95-6 45324-97-8 79950-30-4 79950-31-5 79950-32-6 100477-70-1**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing triisobutylaluminum and carbon tetrachloride, for alternating copolymn. of acrylonitrile with styrene)
RN 23184-57-8 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, samarium(3+) salt (8CI, 9CI) (CA INDEX NAME)



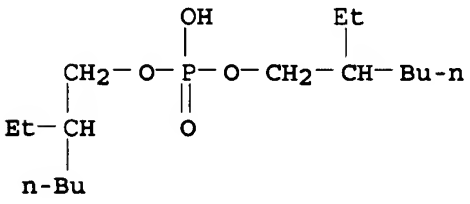
●1/3 Sm(III)

RN 26312-52-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, thulium(3+) salt (8CI, 9CI) (CA INDEX NAME)



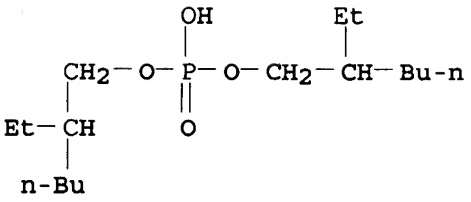
●1/3 Tm(III)

RN 38326-04-4 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, neodymium(3+) salt (3:1) (CA INDEX NAME)



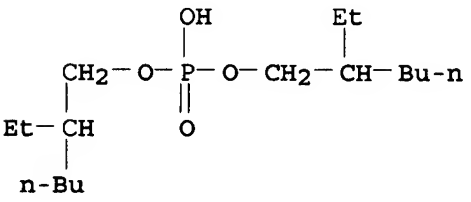
●1/3 Nd(III)

RN 38326-05-5 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, ytterbium(3+) salt (9CI) (CA INDEX NAME)



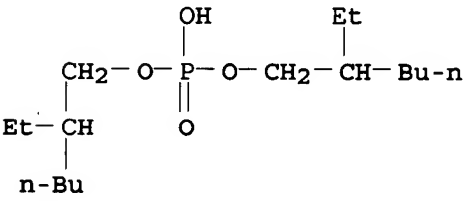
●1/3 Yb(III)

RN 45324-94-5 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, holmium(3+) salt (9CI) (CA INDEX NAME)



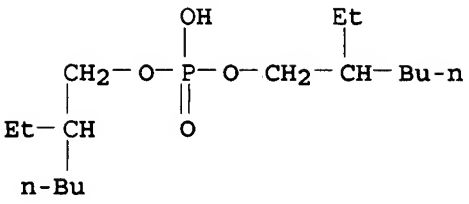
●1/3 Ho(III)

RN 45324-95-6 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, lanthanum(3+) salt (9CI) (CA INDEX NAME)



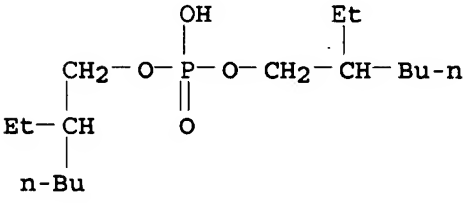
●1/3 La(III)

RN 45324-97-8 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, praseodymium(3+) salt (9CI) (CA INDEX NAME)



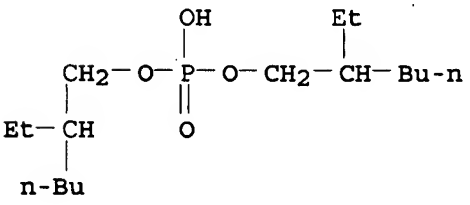
●1/3 Pr(III)

RN 79950-30-4 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, terbium(3+) salt (9CI) (CA INDEX NAME)



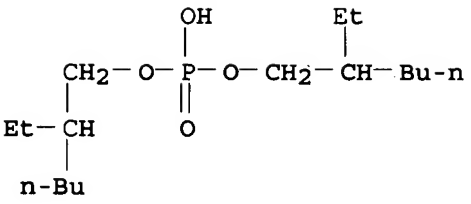
●1/3 Tb(III)

RN 79950-31-5 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, erbium(3+) salt (9CI) (CA INDEX NAME)



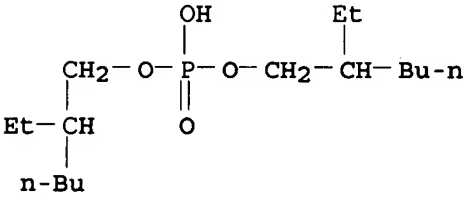
●1/3 Er(III)

RN 79950-32-6 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, lutetium(3+) salt (9CI) (CA INDEX NAME)



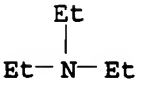
●1/3 Lu(III)

RN 100477-70-1 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, cerium(3+) salt (9CI) (CA INDEX NAME)



●1/3 Ce(III)

IT **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing triisobutylaluminum and neodymium phosphonate, for alternating copolymn. of acrylonitrile with styrene)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



CC 35-3 (Chemistry of Synthetic High Polymers)
IT 7440-00-8D, Neodymium, naphthenates 14589-38-9 **23184-57-8**
26312-52-7 38326-04-4 38326-05-5
45324-94-5 45324-95-6 45324-97-8
79321-05-4 **79950-30-4 79950-31-5**
79950-32-6 100477-70-1
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing triisobutylaluminum and carbon tetrachloride, for alternating copolymn. of acrylonitrile with styrene)
IT 67-66-3, uses and miscellaneous 68-12-2, uses and miscellaneous
75-09-2, uses and miscellaneous **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing triisobutylaluminum and neodymium phosphonate, for alternating copolymn. of acrylonitrile with styrene)

L40 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:76093 HCAPLUS
DOCUMENT NUMBER: 108:76093
TITLE: Crystalline block copolymer and process for producing the same
INVENTOR(S): Takeshi, Ikematu; Hideo, Morita; Akiyoshi, Hirata
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 46 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 234512	A2	19870902	EP 1987-102388 <--	19870219
EP 234512	A3	19890517		
EP 234512	B1	19960522		
R: BE, DE, ES, FR, GB, IT				
JP 62192416	A	19870824	JP 1986-33945 <--	19860220
JP 03064526	B	19911007		
JP 62215616	A	19870922	JP 1986-57096 <--	19860317
JP 03064527	B	19911007		
JP 62275114	A	19871130	JP 1986-117188 <--	19860523
JP 04003761	B	19920124		
ES 2087057	T3	19960716	ES 1987-102388 <--	19870219
US 5159022	A	19921027	US 1991-703698 <--	19910521

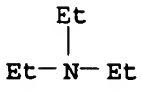
PRIORITY APPLN. INFO.:		
JP 1986-33945	A	19860220
JP 1986-57096	A	19860317
JP 1986-117188	A	19860523

<--
US 1987-17235 B1
198702
20
<--
US 1989-342653 B1
198904
25
<--

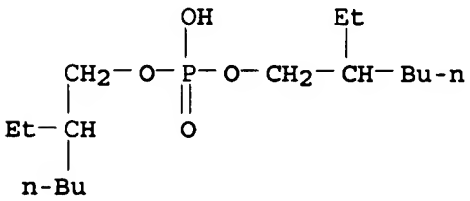
AB Block copolymers containing ≥1 crystalline 1,4-trans conjugated diene polymer block sandwiched between ≥2 vinylarom. hydrocarbon blocks (glass temperature ≥50°) are prepared using a composite catalyst containing (A) organic Ba or Sr compds., (B) organic Li compds., (C) organic Mg compds., and optionally (D) organic Al or Zn compds. Thus, a mixture containing 1.5 kg cyclohexane solution (containing 20% styrene), 0.0113 mol Bu2Mg, 0.0113 mol sec-BuLi and 0.034 mol THF was heated at 65° for 3 h to give polystyrene at 100% conversion, mixed with 0.0023 mol bis(2-ethylhexyl)phosphate of lanthanum metal, and 3.5 kg cyclohexane solution (containing 20% 1,3-butadiene), heated at 65° for 3 h to give a diblock polymer (number-average mol. weight 32,600), and finally coupled with di-Ph carbonate at 65° for 1 h to give a polymer (number-average mol. weight 64,000) with elongation 700%, resilience 58%, shape recovery temperature 60°, and shape recovery 95%, vs. 180, 56, not recovered, and 40, resp., for a similar run without using coupling agents.

IT **121-44-8**, uses and miscellaneous **23184-57-8** **38326-04-4 45324-97-8 79950-28-0** **79950-29-1 100477-70-1 112667-44-4D**, lanthanide salts **112673-79-7**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of styrene and dienes, for manufacture of crystalline block copolymers)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



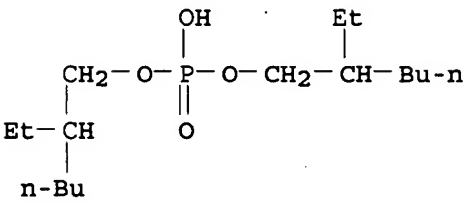
RN 23184-57-8 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, samarium(3+) salt (8CI, 9CI) (CA INDEX NAME)



●1/3 Sm(III)

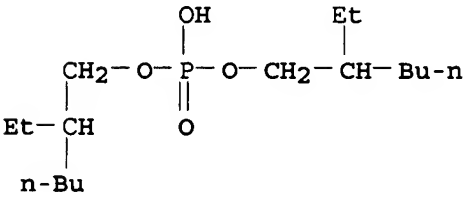
RN 38326-04-4 HCAPLUS

CN Phosphoric acid, bis(2-ethylhexyl) ester, neodymium(3+) salt (3:1) (CA INDEX NAME)



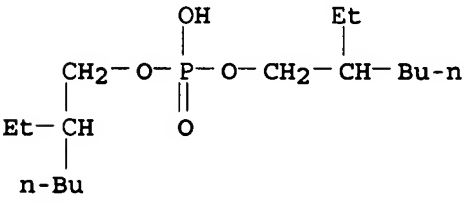
●1/3 Nd(III)

RN 45324-97-8 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, praseodymium(3+) salt (9CI) (CA INDEX NAME)



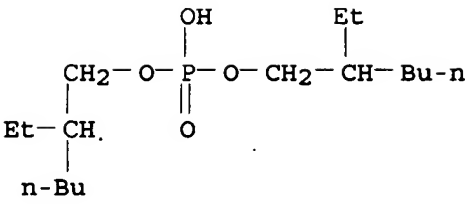
●1/3 Pr(III)

RN 79950-28-0 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, europium(3+) salt (9CI) (CA INDEX NAME)



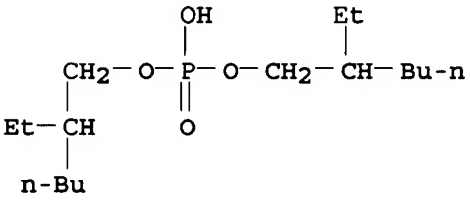
●1/3 Eu(III)

RN 79950-29-1 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, gadolinium(3+) salt (9CI) (CA INDEX NAME)



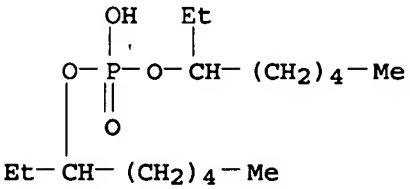
●1/3 Gd(III)

RN 100477-70-1 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, cerium(3+) salt (9CI) (CA INDEX NAME)

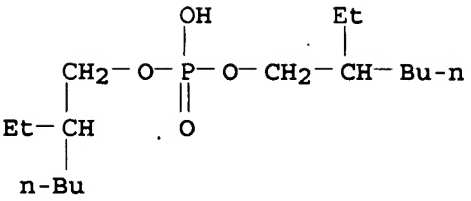


●1/3 Ce(III)

RN 112667-44-4 HCAPLUS
CN 3-Octanol, hydrogen phosphate (9CI) (CA INDEX NAME)



RN 112673-79-7 HCAPLUS
CN 1-Hexanol, 2-ethyl-, hydrogen phosphate, promethium(3+) salt (9CI) (CA INDEX NAME)



●1/3 Pm(III)

IC ICM C08F297-00
CC 35-4 (Chemistry of Synthetic High Polymers)
IT 97-93-8, uses and miscellaneous 100-99-2, uses and miscellaneous 109-99-9, uses and miscellaneous **121-44-8**, uses and miscellaneous 149-57-5D, lanthanide salts 557-20-0 598-30-1 871-27-2 1116-73-0 1191-47-5, Dibutyl magnesium 1854-19-9 2388-10-5 2397-67-3 13525-99-0D, lanthanide salts 14802-03-0D, lanthanide salts **23184-57-8** 25154-52-3D, lanthanide salts 26206-66-6D, lanthanide salts 28575-89-5 28987-17-9 31291-42-6 37411-25-9 **38326-04-4 45324-97-8** 62202-86-2, Butylethyl magnesium **79950-28-0** **79950-29-1** 84348-31-2 84370-80-9 96024-62-3, Magala 7.5E **100477-70-1** 105937-59-5, Lanthanum bis(2-ethylhexyl)phosphate **112667-44-4D**, lanthanide salts **112673-79-7** 112673-80-0 112673-81-1 112673-82-2 112673-83-3
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of styrene and dienes, for manufacture of crystalline block copolymers)

L40 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:407824 HCAPLUS
DOCUMENT NUMBER: 107:7824
TITLE: Titanium slurries for polyesters
INVENTOR(S): Watanabe, Katsumi; Ueda, Tomoaki; Okasaka, Hidesada
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62018423	A	19870127	JP 1985-156382	198507 16

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PRIORITY APPLN. INFO.: JP 1985-156382 198507 16

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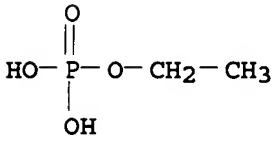
AB Fine granules of Ti oxide having primary granular diameter <2 μ are

dispersed in glycols with high-shear dispersing apparatus using P compds. and alkalies as dispersants. TiO2 was dispersed in ethylene glycol (I) in the presence of H3PO4 and Et4NOH and used in the manufacture of di-Me terephthalate-I copolymer.

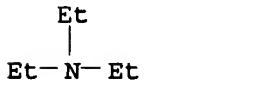
IT **1623-14-9**, Monoethyl phosphate
RL: **USES (Uses)**
(dispersing agents, containing alkalies, for titanium oxide in ethylene glycol)

RN 1623-14-9 HCAPLUS
CN Phosphoric acid, monoethyl ester (CA INDEX NAME)



IT **121-44-8**, uses and miscellaneous
RL: **USES (Uses)**
(dispersing agents, containing phosphorus compds., for titanium oxide in ethylene glycol)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC ICM C08G063-22
CC 35-4 (Chemistry of Synthetic High Polymers)
IT **1623-14-9**, Monoethyl phosphate 7601-54-9, Trisodium phosphate 7664-38-2, uses and miscellaneous 7722-88-5 13011-54-6, Ammonium sodium hydrogen phosphate 50813-16-6, Sodium metaphosphate
RL: **USES (Uses)**
(dispersing agents, containing alkalies, for titanium oxide in ethylene glycol)

IT 77-98-5, Tetraethylammonium hydroxide **121-44-8**, uses and miscellaneous 1310-58-3, Potassium hydroxide, uses and miscellaneous 1310-73-2, Sodium hydroxide, uses and miscellaneous 1336-21-6, Ammonium hydroxide
RL: **USES (Uses)**
(dispersing agents, containing phosphorus compds., for titanium oxide in ethylene glycol)

L40 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:102831 HCAPLUS
DOCUMENT NUMBER: 106:102831
TITLE: Onium salt catalysts for polymerization of thermosetting polycarbonates
INVENTOR(S): Mues, Peter; Kerimis, Dimitrios; Mueller, Hanns Peter; Buysch, Hans Josef
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 7 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent

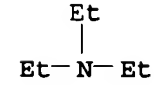
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3523399	A1	19870108	DE 1985-3523399	198506 29
			<--	
EP 209722	A1	19870128	EP 1986-108236	198606 16
			<--	
EP 209722	B1	19880831		
R: DE, FR, GB, IT, NL				
US 4707539	A	19871117	US 1986-875602	198606 18
			<--	
JP 62004723	A	19870110	JP 1986-147239	198606 25
			<--	
PRIORITY APPLN. INFO.:			DE 1985-3523399 A	198506 29
			<--	

AB Thermosetting polycarbonates are prepared by ring-opening polymerization of cyclic carbonates with bifunctional, crosslinking cyclic carbonates in the presence of the onium salts R1R2R3R4L OnP(O)Y2-nY1 (L = N, P; R1 = H, hydrocarbyl; R2-4 = H, hydrocarbyl, or form a ring; Y, Y1 = alkoxy, aryloxy, alkylthio, alkyl, aryl; n = 1 or 2) as catalysts. A mixture of neopentyl glycol cyclic carbonate 90, 4-ethyl-4-(hydroxymethyl)-1,3-dioxan-2-one carbonate (2:1) 10, and Et3N·MePO(OMe)2 0.1 part, heated at 150°, solidified in 5-10 min to give a clear, tough, elastic, strong polycarbonate.

IT **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing phosphate esters, for polymerization of cyclic carbonates)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

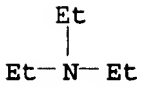


IT **86695-30-9**, Triethylaminedibutylphosphate
107070-32-6 **107070-33-7**,
Diethylaminedimethylphosphate **107070-34-8**,
Dibutylaminedimethylphosphate
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of cyclic carbonates)

RN 86695-30-9 HCAPLUS
CN Phosphoric acid, dibutyl ester, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

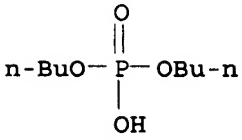
CM 1

CRN 121-44-8
CMF C6 H15 N



CM 2

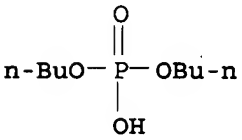
CRN 107-66-4
CMF C8 H19 O4 P



RN 107070-32-6 HCAPLUS
CN Phosphoric acid, dibutyl ester, compd. with N,N-dimethyl-1,4-benzenediamine (1:1) (9CI) (CA INDEX NAME)

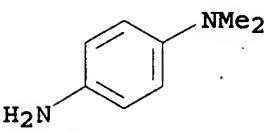
CM 1

CRN 107-66-4
CMF C8 H19 O4 P



CM 2

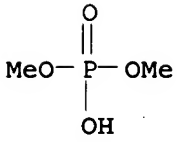
CRN 99-98-9
CMF C8 H12 N2



RN 107070-33-7 HCAPLUS
CN Phosphoric acid, dimethyl ester, compd. with N-ethylethanamine (1:1) (9CI) (CA INDEX NAME)

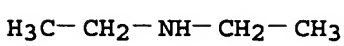
CM 1

CRN 813-78-5
CMF C2 H7 O4 P



CM 2

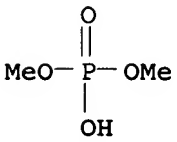
CRN 109-89-7
CMF C4 H11 N



RN 107070-34-8 HCAPLUS
CN Phosphoric acid, dimethyl ester, compd. with N-butyl-1-butanamine (1:1) (9CI) (CA INDEX NAME)

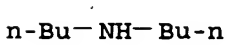
CM 1

CRN 813-78-5
CMF C2 H7 O4 P



CM 2

CRN 111-92-2
CMF C8 H19 N



IC ICM C08G063-62
ICS C08G063-38
CC 35-3 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 67
IT 96-54-8, 1-Methylpyrrole 98-94-2, N,N-Dimethylcyclohexylamine 103-83-3, N,N-Dimethylbenzylamine 109-02-4, 4-Methylmorpholine 111-92-2, Dibutylamine **121-44-8**, uses and miscellaneous 280-57-9, Triethylenediamine 998-40-3, Tributylphosphine 3001-72-7 6674-22-2, 1,8-Diazabicyclo[5.4.0]undec-7-ene

RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing phosphate esters, for polymerization of cyclic carbonates)

IT **86695-30-9**, Triethylaminedibutylphosphate
107070-32-6 **107070-33-7**,
Diethylaminedimethylphosphate **107070-34-8**,
Dibutylaminedimethylphosphate
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of cyclic carbonates)

L40 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:592261 HCAPLUS
DOCUMENT NUMBER: 105:192261
TITLE: Thermosetting epoxy resin mixtures
INVENTOR(S): Kerimis, Dimitrios; Mueller, Hanns Peter; Uerdingen, Walter; Heine, Heinrich
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 37 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

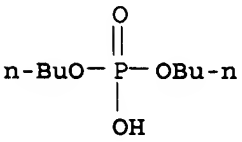
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3447251	A1	19860626	DE 1984-3447251 <--	19841222
EP 191926	A1	19860827	EP 1985-115637 <--	19851209
EP 191926	B1	19900131		
R: CH, DE, FR, GB, IT, LI				
US 4689376	A	19870825	US 1985-808176 <--	19851212
JP 61155422	A	19860715	JP 1985-283146 <--	19851218
JP 05070650	B	19931005		

PRIORITY APPLN. INFO.: DE 1984-3447251 A 19841222
OTHER SOURCE(S): MARPAT 105:192261
AB Amine or quaternary ammonium (thio)phosph(on)ates are useful as latent catalysts for the crosslinking of epoxy resins by anhydrides. Thus, stirring 112 parts triethylenediamine and 1240 parts MePO(OMe)2 at 100° for 8 h and stripping in vacuo gave 355 parts colorless, crystalline salt. A mixture of diglycidyl 1,2-cyclohexanedicarboxylate (viscosity 900 mPa-s at 25°) 100, methylhexahydrophthalic anhydride 100, and this salt 2 parts had viscosity 540, 750, 780, 1000, and 3200 mPa-s after 0, 1, 2, 4, and 11 days, resp., at 25° and gel time at 160° 125 s,

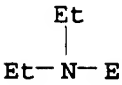
compared with 510, 2480, 27,200, tough, solid, and 56, resp., with PhCH2NMe2 as catalyst.

IT **107-66-4D**, reaction products with amines **121-44-8D**, reaction products with phosphonate esters
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, latent, for crosslinking of epoxy resins)

RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC ICM C08L063-00
ICS C08K005-09; C08K005-17; C08K005-49; C08J003-24; C08G059-68; C08G059-42; H01B003-40

CC 37-6 (Plastics Manufacture and Processing)

IT 103-83-3D, reaction products with phosphonate esters
107-66-4D, reaction products with amines 111-92-2D, reaction products with phosphonate esters **121-44-8D**, reaction products with phosphonate esters 280-57-9D, reaction products with phosphonate esters 756-79-6D, reaction products with amines
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, latent, for crosslinking of epoxy resins)

L40 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:406978 HCAPLUS
DOCUMENT NUMBER: 105:6978
TITLE: Butadiene polymers with specified microstructure and properties
INVENTOR(S): Ikematsu, Takeshi; Hattori, Yasuo; Inoki, Yoshihiro; Tanaka, Mitsuhiro
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan
SOURCE: Ger. Offen., 64 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3523613	A1	19860116	DE 1985-3523613	19850702

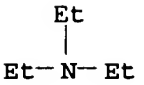
			<--	
DE 3523613	C2	19930121		
JP 61016753	A	19860124	JP 1984-136455	198407 03
			<--	
JP 61019611	A	19860128	JP 1984-138950	198407 06
			<--	
JP 03070726	B	19911108		
JP 61097311	A	19860515	JP 1984-217296	198410 18
			<--	
JP 03059083	B	19910909		
FR 2567135	A1	19860110	FR 1985-9957	198506 28
			<--	
FR 2567135	B1	19890113		
GB 2161169	A	19860108	GB 1985-16627	198507 01
			<--	
GB 2161169	B	19880420		
DE 3546753	C2	19921112	DE 1985-3546753	198507 02
			<--	
US 4931376	A	19900605	US 1989-387428	198907 28
			<--	
PRIORITY APPLN. INFO.:			JP 1984-136455 A	198407 03
			<--	
			JP 1984-138950 A	198407 06
			<--	
			JP 1984-217296 A	198410 18
			<--	
			US 1985-748555 B1	198506 25
			<--	

AB Butadiene homopolymers or copolymers with other dienes with trans-1,4-microstructure 80-95%, polydispersity 1.2-4, m.p. (DSC) 40-130°, and boiling cyclohexane-insol. fraction ≤1% have good processability and phys. properties. Thus, heating 300 g hexane solution of butadiene with 0.08 mmol La bis(2-ethylhexyl) phosphate and 0.32 mmol Bu2Mg at 75° for 90 min gave a polymer with conversion 86%, trans and vinyl microstructure 89 and 6%, weight-average mol. weight 160,000, and polydispersity 1.2.

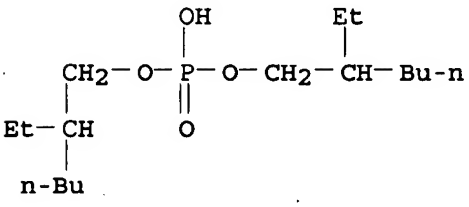
IT **121-44-8**, uses and miscellaneous **45324-95-6** **100477-70-1** **102036-51-1** **102840-64-2**

RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of butadiene with controlled microstructure)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

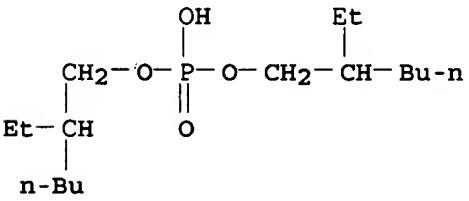


RN 45324-95-6 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, lanthanum(3+) salt (9CI) (CA INDEX NAME)



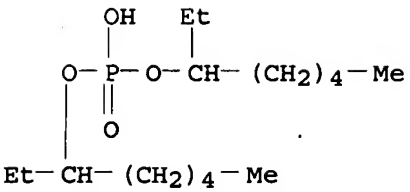
●1/3 La(III)

RN 100477-70-1 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, cerium(3+) salt (9CI) (CA INDEX NAME)



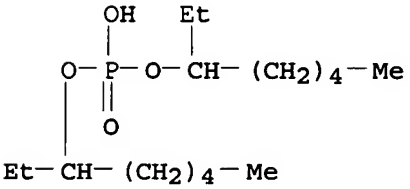
●1/3 Ce(III)

RN 102036-51-1 HCAPLUS
CN 3-Octanol, hydrogen phosphate, lanthanum(3+) salt (9CI) (CA INDEX NAME)



●1/3 La(III)

RN 102840-64-2 HCAPLUS
CN 3-Octanol, hydrogen phosphate, cerium(3+) salt (9CI) (CA INDEX NAME)



●1/3 Ce(III)

IC ICM C08F036-06
ICS C08F004-50; C08F004-12; C08F004-48; C08F004-52; A41G003-00
CC 35-3 (Chemistry of Synthetic High Polymers)
IT 60-29-7, uses and miscellaneous 97-93-8, uses and miscellaneous 109-99-9, uses and miscellaneous 110-18-9 **121-44-8**, uses and miscellaneous 1191-47-5 2388-10-5 4439-90-1 7439-91-0D, naphthenates 17589-14-9 22065-26-5 25440-26-0 **45324-95-6** 60756-59-4 60903-69-7 79968-72-2 82333-24-2 87856-24-4 92898-62-9 92898-66-3 94808-57-8 **100477-70-1** 101949-81-9 101949-82-0 101949-83-1 101949-84-2 101962-31-6 102036-45-3 102036-46-4 102036-47-5 102036-48-6 102036-49-7 102036-50-0 **102036-51-1** 102036-53-3 102840-62-0 **102840-64-2**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for polymerization of butadiene with controlled microstructure)

L40 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:177792 HCAPLUS
DOCUMENT NUMBER: 104:177792
TITLE: Prevention of spotting in thermal imaging compositions
INVENTOR(S): Miller, Alan G.
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
SOURCE: Eur. Pat. Appl., 29 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

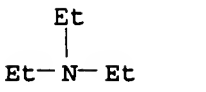
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 159874	A2	19851030	EP 1985-302573	198504 12
			<--	
EP 159874	A3	19860604		
EP 159874	B1	19910724		
R: CH, DE, FR, GB, IT, LI, NL				
CA 1236299	A1	19880510	CA 1985-475897	198503 07
			<--	
AU 8539800	A	19851024	AU 1985-39800	198503 13
			<--	
AU 580034	B2	19881222		
BR 8501734	A	19851210	BR 1985-1734	198504 12
			<--	
JP 60234885	A	19851121	JP 1985-80044	198504 15
			<--	
JP 06071823	B	19940914		
US 4917730	A	19900417	US 1985-788162	198510 16
			<--	
PRIORITY APPLN. INFO.:			US 1984-600474 A	198404 16
			<--	

OTHER SOURCE(S): MARPAT 104:177792

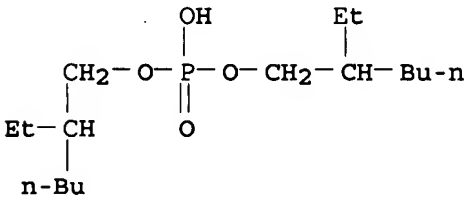
AB Thermal imaging compns. consist of (a) ≥1 leuco dye, (b) a nitrate, and (c) ≥1 base having a conjugate pKa ≥ 0. The base serves as an antispotting agent for the transparency film during the manufacturing process. The leuco dye is selected from the group consisting of styryl, phenoxazine, phenothiazine, and phenazine derivs. The base is selected from amines, amides, amine oxides, ureas, carboxylic acid salts, alc. salts, thiol salts, P-containing acid salts, phosphines, inorg. salts, and salts of complexes of carboxylic acids having pKa = 0-25. Thus, by addition of 0.1 mmol of N-N bis(2-hydroxyethyl)aniline, the spotting was totally removed from a thermal imaging film.

IT **121-44-8**, uses and miscellaneous **10432-15-2**
32509-12-9
RL: **USES (Uses)**
(as antispotting agent in thermal imaging composition)

RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)

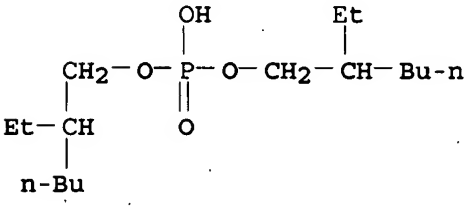


RN 10432-15-2 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, nickel(2+) salt (2:1) (CA INDEX NAME)



●1/2 Ni(II)

RN 32509-12-9 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester, lithium salt (8CI, 9CI) (CA INDEX NAME)



◐ Li

IC ICM B41M005-26
CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 57-13-6, uses and miscellaneous 60-35-5, uses and miscellaneous 62-53-3, uses and miscellaneous 91-63-4 91-66-7 100-61-8, uses and miscellaneous 102-06-7 109-08-0 109-89-7, uses and miscellaneous 110-86-1, uses and miscellaneous **121-44-8**, uses and miscellaneous 124-41-4 127-19-5 253-82-7 288-47-1 289-80-5 552-38-5 555-24-8 632-22-4 694-59-7 829-85-6 1310-58-3, uses and miscellaneous 1313-82-2, uses and miscellaneous 1619-34-7 2180-18-9 3264-82-2 **10432-15-2** 16761-13-0 22208-42-0 30947-30-9 **32509-12-9** 52829-07-9 101678-04-0 101819-98-1
RL: **USES (Uses)**
(as antispotting agent in thermal imaging composition)

L40 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:490203 HCAPLUS

DOCUMENT NUMBER: 103:90203
TITLE: Tool grinding oil
PATENT ASSIGNEE(S): Yushiro Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

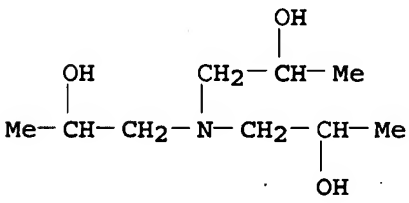
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60069198	A	19850419	JP 1983-165139	19830909
			<--	
JP 02014399	B	19900406		

PRIORITY APPLN. INFO.: JP 1983-165139 19830909
<--

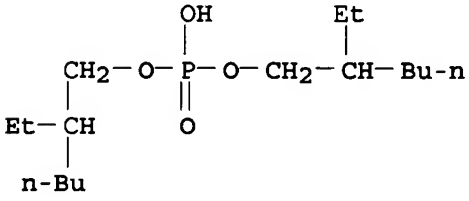
AB The title oil contains amines and ≥1 P compds. selected from RO(R1O)POH [I; R = H, R2, R2(OCH2CH2)m; R1 = R2, R2(OCH2CH2)n (R2 = C4-24 alkyl, C4-24 alkenyl, aryl, C7-24 aralkyl, C7-24 alkylaryl; m, n = integer 1-20)]. The oil can be used to grind tools without burning or corroding the materials. Thus, a mixture of mineral oil (mixture of SAE number 10 and SAE number 20), I (R = H; R1 = octadecyl) [24219-16-7], triisopropanolamine [122-20-3], and oleyl alc. [143-28-2] was used in grinding SKH-9 Fe alloy without metal burning or corrosion.

IT **122-20-3 298-07-7**
RL: **USES (Uses)**
(cutting oils containing)

RN 122-20-3 HCAPLUS
CN 2-Propanol, 1,1',1''-nitrilotris- (CA INDEX NAME)



RN 298-07-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



IC ICM C10M141-10
ICI C10M141-10, C10M137-04, C10M133-04; C10N030-06, C10N030-12, C10N040-22
CC 51-8 (Fossil Fuels, Derivatives, and Related Products)
IT 78-96-6 101-83-7 110-97-4 **122-20-3** 143-28-2
298-07-7 701-64-4 838-85-7 1116-76-3 1623-07-0
1623-08-1 1838-19-3 2310-89-6 2958-09-0 4712-55-4
9021-89-0 9071-85-6 10542-07-1 14450-07-8 17176-77-1
21302-09-0 24219-16-7 25088-57-7 25852-45-3 26569-08-4
26982-05-8 28258-93-7 28603-06-7 30526-26-2 36119-17-2
39359-12-1 49862-22-8 50571-12-5 94060-69-2 97701-25-2
97701-26-3 97701-27-4 97701-28-5 97701-29-6 97701-30-9
97701-31-0 97701-32-1 97701-33-2 97701-34-3 97701-40-1
97794-96-2
RL: **USES (Uses)**
(cutting oils containing)

L40 ANSWER 25 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:426711 HCAPLUS
DOCUMENT NUMBER: 95:26711
TITLE: Titanium dioxide pigments with good dispersibility
INVENTOR(S): Koehler, Klaus; Woditsch, Peter; Rieck, Hilmar; Rodi, Fritz
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

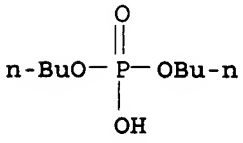
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2946549	A1	19810527	DE 1979-2946549 <--	197911 17
EP 29137	A1	19810527	EP 1980-106568 <--	198010 25
EP 29137	B1	19840222		
R: DE, FR, GB, IT				
NO 8003287	A	19810518	NO 1980-3287 <--	198011 03
US 4344799	A	19820817	US 1980-203010 <--	198011 03
FI 8003550	A	19810518	FI 1980-3550 <--	198011 13
BR 8007457	A	19810526	BR 1980-7457	198011 14

PRIORITY APPLN. INFO.: DE 1979-2946549 A 197911 17

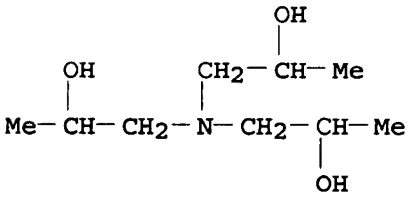
AB TiO2 which has been treated with small amts. of SiO2 and Al2O3 is sprayed with a hydrophobic material such as a siloxane or (BuCHEtCH2O)2P(O)OH [298-07-7] and a hydrophilic compound such as N(CH2CH2OH)3 (I) [102-71-6] to prepare pigments with good dispersibility in lacquers, plastics, and paper. Thus, a TiO2 pigment treated with 0.8% SiO2 and 2.5% Al2O3 is sprayed with 0.25% OH-terminated siloxane (mol. weight 490) and 0.75% I and milled to prepare a pigment which dispersed rapidly in a xylene solution of an alkyd resin.

IT **107-66-4 122-20-3 298-07-7**
RL: **USES (Uses)**
(titanium dioxide pigments containing, for improved dispersibility)

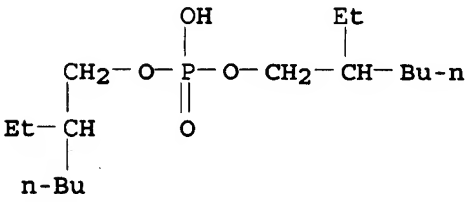
RN 107-66-4 HCAPLUS
CN Phosphoric acid, dibutyl ester (CA INDEX NAME)



RN 122-20-3 HCAPLUS
CN 2-Propanol, 1,1',1''-nitrilotris- (CA INDEX NAME)



RN 298-07-7 HCAPLUS
CN Phosphoric acid, bis(2-ethylhexyl) ester (CA INDEX NAME)



IC C09C001-36; C09D017-00; C09D005-00
CC 42-5 (Coatings, Inks, and Related Products)
IT 102-71-6, uses and miscellaneous **107-66-4 122-20-3 298-07-7**
RL: **USES (Uses)**
(titanium dioxide pigments containing, for improved dispersibility)

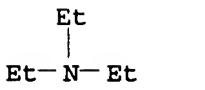
L40 ANSWER 26 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1981:140620 HCAPLUS
DOCUMENT NUMBER: 94:140620
TITLE: Polyesters
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55115425	A	19800905	JP 1979-20794	197902 26
			<--	
JP 63015296	B	19880404		

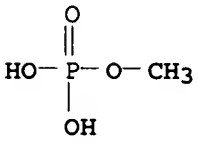
PRIORITY APPLN. INFO.: JP 1979-20794 A 197902 26
<--

AB A polyester based on dicarboxylic acids [mainly terephthalic acid (I)] and glycols [mainly ethylene glycol (II)] is prepared by adding I and II to bis(β-hydroxyethyl) terephthalate (III) and/or its oligomer, esterifying it, and adding (a) ≥1 II-soluble Mg or Mn compound, (b) ≥1 tertiary amine or quaternary ammonium hydroxide, and (c) ≥1 P compound chosen from phosphorous and/or phosphoric acid and/or their esters at $2 \leq A \leq 40$, $0.5 \leq B \leq 15$, and $0.8 \leq A/C \leq 5.0$, where A, B, and C are the number of g-atoms of Mg or Mn in a, of N in b, and of P in c, resp., per 10 g polyester. Thus, III 90, I 86.5, and II 37.1 parts were esterified. To 105 parts of the product (100 parts polyester [25038-59-9]), Mg(OAc)2.4H2O 0.085 (A = 3.96), methyl acid phosphate (1:1 mixture of mono- and dimethyl phosphate [813-78-5]) 0.030, Sb2O3 0.030, Et4NOH [77-98-5] (B = 1.02, A/c = 1.56) 0.015 part were added and the mixture was heated at 255-85° for 1 h, during which time the pressure was lowered from 760 to 1 mm. The reaction was completed at 285°/0.5-1 mm after 2 h. The polyester had intrinsic viscosity 0.641 (o-chlorophenol 25°), softening point 259.9°, diethylene glycol content 1.07%, 30.5 CO2H ends/106 g, 5.4% haze, L 45.3 and b 3.5 for color difference, and heat resistance (measured by difference in intrinsic viscosities after 8 and 68 min at 300° under N) 0.107. The polyester was biaxially drawn 3.3 and 3.8 times its original length to obtain a 50 μ-thick film. It cast well using a casting speed of 45 m/min under 10 kV, and had film haze 0.3%.

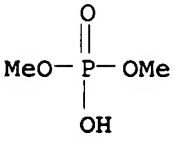
IT **121-44-8**, preparation **812-00-0 813-78-5**
RL: **USES (Uses)**
(poly(ethylene terephthalate) manufacture by polycondensation in present of)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



RN 812-00-0 HCAPLUS
CN Phosphoric acid, monomethyl ester (CA INDEX NAME)



RN 813-78-5 HCAPLUS
CN Phosphoric acid, dimethyl ester (CA INDEX NAME)

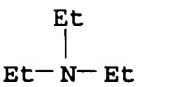


IC C08G063-22; G03C001-76; G11B005-62; H01B003-42
CC 36-3 (Plastics Manufacture and Processing)
IT 77-98-5 **121-44-8**, preparation 142-72-3 **812-00-0**
813-78-5 1309-64-4, uses and miscellaneous 2180-18-9
RL: **USES (Uses)**
(poly(ethylene terephthalate) manufacture by polycondensation in present of)

L40 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1979:157615 HCAPLUS
DOCUMENT NUMBER: 90:157615
TITLE: Intramolecular hydrolysis of glycinamide and glycine dipeptides coordinated to cobalt(III). 2. Reactions of the cis-[Co(en)2(OH2/OH)(glyNHR)]3+/2+ ions (R = H, CH2CO2C3H7, CH2CO2-) and the effect of buffer species
AUTHOR(S): Boreham, C. J.; Buckingham, D. A.; Keene, F. R.
CORPORATE SOURCE: Res. Sch. Chem., Aust. Natl. Univ., Canberra, Australia
SOURCE: Journal of the American Chemical Society (**1979**), 101(6), 1409-21
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The intramol. addition of Co(III)-bound H2O and OH- to glycinamide, glycylglycine iso-Pr ester, and glycylglycine also coordinated to Co(III) in the cis-[Co(en)2(OH2/OH)(glyNHR)]3+/2+ ions (R = H, CH2CO2C3H7, CH2CO2-) was investigated both in the the absence and presence of buffers. For the dipeptide complex (R = CH2CO2C3H7) both the aqua and hydroxo species form [Co(en)2(glyO)]2+, but loss of OH- also occurs resulting in the chelated amide

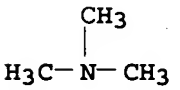
[Co(en)2(glyNHR)]3+. A combination of rate and product anal. data suggests that the initial cyclization is rate determining under all conditions. Buffer species act as a general bases in this rate-determining process, but they also enhance the formation of the hydrolysis product. Coordination H2O is more reactive than coordinated OH- owing largely to a more pos. ΔS*.

IT **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycine peptide in cobalt complex)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **48000-95-9**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycylamides in cobalt complexes)
RN 48000-95-9 HCAPLUS
CN Phosphoric acid, monomethyl ester, ion(1-) (9CI) (CA INDEX NAME)

IT **75-50-3**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycylamine in cobalt complex)
RN 75-50-3 HCAPLUS
CN Methanamine, N,N-dimethyl- (CA INDEX NAME)



CC 67-2 (Catalysis and Reaction Kinetics)
IT 56-14-4, uses and miscellaneous **121-44-8**, uses and miscellaneous 142-44-9, uses and miscellaneous 23297-34-9, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycine peptide in cobalt complex)
IT 71-50-1, uses and miscellaneous 3229-70-7, uses and miscellaneous 14265-44-2, uses and miscellaneous **48000-95-9** 69995-99-9 69996-01-6
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycylamides in cobalt complexes)
IT **75-50-3**, uses and miscellaneous 126-44-3, uses and miscellaneous 3812-32-6, uses and miscellaneous 14124-67-5 14280-30-9, uses and miscellaneous 14609-74-6, uses and miscellaneous 15390-83-7 15584-04-0 16554-54-4 24573-38-4 69996-00-5, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysis by, of hydrolysis of glycylamine in cobalt complex)

L40 ANSWER 28 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1978:511200 HCAPLUS
DOCUMENT NUMBER: 89:111200
TITLE: Unsaturated polyester resin
INVENTOR(S): Makimura, Osamu; Miyake, Hideo
PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan
SOURCE: Jpn. Tokkyo Koho, 10 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53009275	B	19780404	JP 1972-122277	19721206

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PRIORITY APPLN. INFO.: JP 1972-122277 A 19721206

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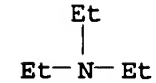
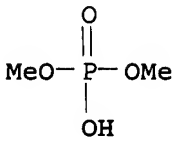
AB A high-mol.-weight saturated polyester is treated with a glycol, possibly in the presence of an alkylamine or a cycloalkylamine, to give a reaction product, which is treated with an unsatd. dicarboxylic acid or its ester in the presence of a P acid or its derivative The resulting unsatd. polyester is mixed with styrene (I) to give an unsatd. polyester resin. Thus, a mixture of 1200 parts poly(ethylene terephthalate) scrap containing 30% glass fibers and 234 parts neopentyl glycol was heated 2 h at 220° under N, cooled to 170°, mixed with dimethyl phosphate [813-78-5] 0.35, fumaric acid 435, and propylene glycol 234 parts, and heated 3.5 h at 210° to give an unsatd. polyester [57399-09-4] (with acid value 19), which was mixed with 45% I, giving an unsatd. polyester resin with APHA color <100.

IT **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for depolymn. of saturated polyester scrap, in manufacture of unsatd. polyesters)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IT **813-78-5**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for unsatd. polyester manufacture from depolymd. saturated polyester scrap)
RN 813-78-5 HCAPLUS
CN Phosphoric acid, dimethyl ester (CA INDEX NAME)



IC C08F299-04
CC 36-3 (Plastics Manufacture and Processing)
IT 109-89-7, uses and miscellaneous 111-92-2 **121-44-8**, uses and miscellaneous
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for depolymn. of saturated polyester scrap, in manufacture of unsatd. polyesters)
IT 115-86-6 **813-78-5** 7664-38-2, uses and miscellaneous 13598-36-2
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for unsatd. polyester manufacture from depolymd. saturated polyester scrap)

L40 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:45227 HCAPLUS
DOCUMENT NUMBER: 84:45227
TITLE: Chloral copolymers
INVENTOR(S): Vogl, Otto F.
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: U.S., 23 pp. Division of U.S. 3,775,371.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 3917546	A	19751104	US 1973-352387		197304 18
US 3668184	A	19720606	US 1969-886739		196912 19
US 3775371	A	19731127	US 1972-227684		197202 18
US 3932318	A	19760113	US 1974-530438		197412 06
PRIORITY APPLN. INFO.:			US 1969-886739	A3	196912 19
			US 1972-227684	A3	197202 18

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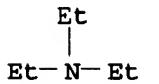
US 1966-558631 A3
196606
20
<--
US 1966-580217 A2
196609
19
<--
US 1968-731622 A2
196805
23
<--
US 1973-352387 A3
197304
18
<--

AB Chloral (I) [75-87-6] was copolymd. with ≥1 isocyanate, isothiocyanate, diisocyanate, diisothiocyanate, or ketene compound to form nonflammable copolymers. The monomer mixture was prepared at a temperature above the threshold polymerization temperature of the mixture, cooled below the threshold polymerization temperature, and kept quiescent during the polymerization Thus, a mixture of 30 g I and 2.7 g Ph isocyanate was heated to 65°, and the quiescent mixture was polymerized 1 hr at -50° in the presence of 0.4 ml 1M Li tert-butoxide in cyclohexane to yield the insol. chloral-phenyl isocyanate copolymer [25838-94-2].

IT **121-44-8**, uses and miscellaneous **26482-14-4**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for chloral polymerization)

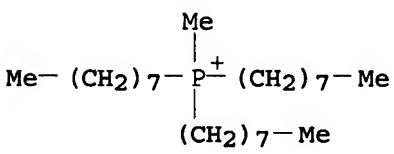
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



RN 26482-14-4 HCAPLUS
CN Phosphonium, methyltrioctyl-, dimethyl phosphate (8CI, 9CI) (CA INDEX NAME)

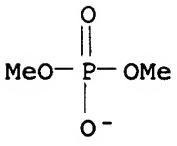
CM 1

CRN 45292-09-9
CMF C25 H54 P



CM 2

CRN 7351-83-9
CMF C2 H6 O4 P



INCL 260002500F
CC 36-3 (Plastics Manufacture and Processing)
IT 56-34-8 100-74-3 102-87-4 110-86-1, uses and miscellaneous
121-44-8, uses and miscellaneous 603-32-7 603-36-1
1038-95-5 1605-53-4 1663-45-2 3607-17-8 3746-01-8
5587-39-3 6163-58-2 13410-61-2 13504-79-5 17663-89-7
18631-95-3 21259-67-6 23250-03-5 **26482-14-4**
32394-38-0 32394-45-9 32394-46-0 32395-05-4 35612-21-6
57959-57-6 57959-58-7 57959-59-8 57959-60-1 57959-62-3
57959-63-4 57959-64-5 57959-65-6 57959-66-7 57959-67-8
57959-68-9 57959-69-0 57959-71-4 57959-72-5 57959-73-6
57959-74-7 57959-75-8 57959-76-9 57959-77-0 57959-78-1
57969-11-6
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, for chloral polymerization)

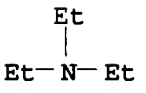
L40 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:8381 HCAPLUS
DOCUMENT NUMBER: 74:8381
TITLE: Liquid developing bath for electrophotography
PATENT ASSIGNEE(S): Ricoh Co., Ltd.
SOURCE: Fr. Demande, 19 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2009688		19700206	FR 1969-17916	196905 30
			<--	
DE 1926918			DE	
GB 1276363			GB	
US 3681243		19720801	US	196905 22
			<--	
PRIORITY APPLN. INFO.:			JP	196805 30
			<--	
			JP	196903 25
			<--	

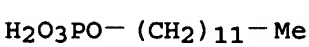
AB Better image separation is achieved and spotty texture due to irregularities in the surface, and consequently in its charge, is avoided by including in the developer (0.1-10% based on the pigment) one of the following: Decalin, azobenzene, camphor, citral, monomeric styrene, a divalent metal bis(di-C3-18 alkyl dithiophosphate), di-Na C2-12 alkyl phosphate, mono-Na di-C2-12 alkyl phosphate, tri-C3-18 alkyl phosphate, alkali metal C12-16 alkyl sulfate, C4-16 alc., C11-15 carboxylic acid, phthalic acid, C1-4 alkyl phthalate, NH3, a C2-17 alkylamine, or an araldehyde. Thus, a mixture of the following is ball-milled for 16 hr: carbon black 5, Nikanol HP-100 (charge control agent) 30, Plexol 966 (dispersing resin) 10, PhMe 45, and a 5% PhMe solution of the Ba salt of one mole each of diisopropyl and of diisobutyl dithiophosphate 10 g. Of this dispersion 5 g is distributed in 1 l. of Isopar-H solvent.

IT **121-44-8**, uses and miscellaneous **2627-35-2** **7057-92-3** **24613-62-5**
RL: **USES (Uses)**
(electrophotographic developing solns. containing)

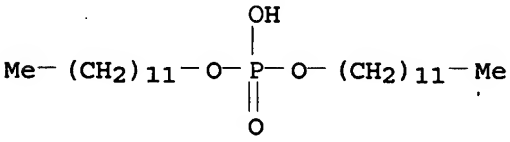
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



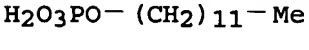
RN 2627-35-2 HCAPLUS
CN Phosphoric acid, monododecyl ester (CA INDEX NAME)



RN 7057-92-3 HCAPLUS
CN Phosphoric acid, didodecyl ester (CA INDEX NAME)



RN 24613-62-5 HCAPLUS
CN Phosphoric acid, monododecyl ester, monosodium salt (8CI, 9CI) (CA INDEX NAME)



IC G03G
CC 74 (Radiation Chemistry, Photochemistry, and Photographic Processes)

IT 57-10-3, uses and miscellaneous 67-63-0, uses and miscellaneous
76-22-2 78-40-0 88-99-3, uses and miscellaneous 91-17-8
100-42-5, uses and miscellaneous 103-33-3 104-55-2
121-44-8, uses and miscellaneous 123-72-8 124-30-1
143-07-7, uses and miscellaneous 143-08-8 151-21-3, uses and miscellaneous 544-63-8, uses and miscellaneous 1120-01-0
2627-35-2 2929-95-5 4376-18-5 4706-78-9 5392-40-5
7057-92-3 24613-62-5 30342-11-1 30342-12-2
36653-82-4
RL: **USES (Uses)**
(electrophotographic developing solns. containing)

L40 ANSWER 31 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1970:67455 HCAPLUS
DOCUMENT NUMBER: 72:67455
TITLE: Compounds containing vanadium, oxygen and phosphorus, and catalysts using same for polymerization of unsaturated compounds
INVENTOR(S): Bayer, John W.; Grinonneau, William C.
PATENT ASSIGNEE(S): Owens-Illinois, Inc.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3488334	A	19700106	US 1965-500329	196510 21

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PRIORITY APPLN. INFO.: US 1965-500329 A 196510 21

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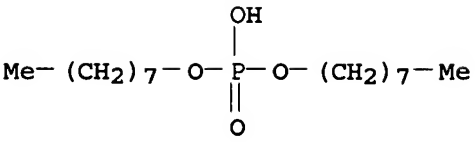
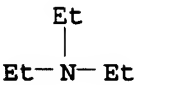
AB A catalyst mixture containing a compound obtained by reaction of a V oxide with an organic P-O compound in the presence of a polar additive, and an organoaluminum compound, is used in the polymerization of ethylenically unsatd. monomers. Thus, a mixture of V2O5 7.3, PhPO3H2 25.3, and MeOH 2.56 g in 200 ml C6H6 was refluxed at 80° for 3 hr to give a mixture, which was dried at 50° for 12 hr. The catalyst mixture (0.5 g) was added with 0.5 ml Et2AlCl to 300 ml C7H16 and the mixture was flushed with N before C2H4 was introduced at 20 psig. The temperature was raised to 57° and the polymerization continued for 2 hr to give 78 g polyethylene. When the V catalyst component was prepared in the absence of the polar compound, or the P compound, or with H2O as a reaction medium, no polymer was formed, and low polymer yields were obtained by using di-Bu phosphite and dioctyl H phosphate. Other polar additives used were PrOH, tert-BuOH, dioxane, tetrahydrofuran, PhSO3H, HOAc, Et2O, H2O, and HCO2H. Polybutadiene and an C2H4-propylene copolymer were also prepared

IT **3115-39-7**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing vanadium oxide, for polymerization of olefins)

RN 3115-39-7 HCAPLUS
CN Phosphoric acid, dioctyl ester (CA INDEX NAME)



IT **121-44-8**, uses and miscellaneous
RL: **USES (Uses)**
(olefin polymers prepared in presence of, catalytic activity in relation to)
RN 121-44-8 HCAPLUS
CN Ethanamine, N,N-diethyl- (CA INDEX NAME)



IC C08F001-42A; C08F001-56B
INCL 260088200
CC 35 (Synthetic High Polymers)
IT 1571-33-1 1809-19-4 **3115-39-7**
RL: CAT (Catalyst use); **USES (Uses)**
(catalysts, containing vanadium oxide, for polymerization of olefins)
IT 60-29-7, uses and miscellaneous 64-18-6, uses and miscellaneous 64-19-7, uses and miscellaneous 67-56-1, uses and miscellaneous 71-23-8, uses and miscellaneous 75-65-0 98-11-3, uses and miscellaneous 109-89-7, uses and miscellaneous 109-99-9, uses and miscellaneous **121-44-8**, uses and miscellaneous 123-91-1, uses and miscellaneous 7732-18-5
RL: **USES (Uses)**
(olefin polymers prepared in presence of, catalytic activity in relation to)

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